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**Report of the Examination**  
**of the School System**  
**of East Orange,**  
**New Jersey**



Issued by  
**The Board of Education**  
1912

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### ERRATA.

Page 17, Table B and Page 18, Table C.

Some of the amounts quoted include purchases of lots, erection of buildings, and payment of bonds. Others do not. Omitting these the figures for East Orange become \$6.12 and \$35.87.

Page 45, last line. Average.

Change the first 92 to 94; the second 92 to 98.

The Stockton School was accidentally omitted from this table.

Page 62, No. 9, second line.

Change "mere" to "more".

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**Report of the Examination**  
**of the School System**  
**of East Orange,**  
**New Jersey**

Moore, Ernest C.



Issued by  
**the Board of Education**  
**1912**

New Haven, Conn., Dec. 12, 1911.

Mr. F. W. Wilson,

Chairman of the Special Committee to Investigate the Educational  
Efficiency of the Schools.

East Orange, N. J.

Dear Sir:—

I beg to submit herewith the report which in accordance with  
the action of your Board of Education at its meeting on June 12th,  
1911, I have made, at your request.

Very sincerely yours,

E. C. MOORE.

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18.10.18/23

*To the Members of the Board of Education,  
East Orange, N. J.*

The Special Committee appointed, pursuant to a resolution adopted by the Board March 27 to examine and report on the efficiency of the present school system, report as follows:

The Committee met immediately after their appointment and were of the unanimous opinion that such an examination as the Board desired could best be made by some disinterested person not in any way connected with the school system. A careful inquiry was made by members of the Committee as to the most available person to engage for the work required and an invitation was sent to Prof. Ernest Carroll Moore, Head of the Bureau of Education of Yale University, to make the examination.

Our invitation was accepted by Prof. Moore, but at his suggestion the work was deferred till after the beginning of the Fall term. Prof. Moore came to East Orange about October first and since that time has been occupied in making a thorough examination of all the schools and compiling the results.

The Committee requested Prof. Moore to make the examination in any manner he deemed best and to prepare his report without consultation with the committee. These instructions have been complied with and the report is herewith submitted for your acceptance.

Respectfully,

FRANK W. WILSON, *Chairman*

FREDERICK W. GARVIN, *President*

ROBERT M. CRATER

CHARLES P. TITUS

VERNON L. DAVEY, *Superintendent*

*Special Committee on Investigation.*



## Foreword

The educational efficiency of a system of schools is not easily determined. There is no single test by which it may be known. Like John Stuart Mills' well-known description of causation, a school system is the sum total of the conditions which produce it.—The attitude of the community toward education in the past, its attitude in the present, the assistance plus or minus which its homes render, its economic status, occupations and government, the character and efficiency of its school boards both now and in time past; the devotion and training and skill of the superintendent of schools, the principals, and teachers; the type of school system which they are developing, the course of study followed, the text books used, school buildings, playgrounds, health, discipline, etc., etc., all enter as contributing factors which in combination for good or ill determine the effectiveness of the work of educating the young. It is impossible to do more than select a few of these conditions for examination. I have chosen from among them all: I, An Historical Sketch of the School System; II, The Community and the Efficiency of the Schools; III, The Board of Education and the Efficiency of the Schools; IV, Cost as Related to the Efficiency of the Schools; V, A General Survey of the Schools and Their Efficiency; VI, The Teachers and Their Work; VII, A New Course of Study; VIII, The High School; IX, Summary of Recommendations.

The improvements which we have to suggest are not inconsiderable in importance. They are supported not alone by theory, but also as we believe, by the best educational practice of the day.

The outline history of the school system has been supplied by the Superintendent and the Principal of the High School. Particular attention has been given to the actual work of the schools. All of the class-rooms in both elementary and high schools have been visited, some of them more than once, and for a considerable time in many instances. We have talked with most of the teachers and supervising officers about their work and about the conditions under which they labor. Through the kind assistance of the Superintendent's office we have examined all the pupils in the 5th, 6th, 7th, and 8th grades in the four fundamental processes of arithmetic, in English composition, in writing and in spelling. In addition some of the citizens of the town have been consulted concerning the work of the schools, school records have been examined, statistics have been gathered, and the course of study and the rules of the Board of Education have been studied. Most careful attention has been given to the work of the High School, not because it is believed to be more important than the elementary schools—it is not—but because whatever shortcomings there may be in the system are apt to appear very clearly under the strain of the transition which pupils must undergo in passing from the elementary grades into the care of secondary

teachers. Comparisons have been made with other school systems, wherever it was felt that such comparisons would be of value. They have not always been made with other cities of the same size; indeed, it is not necessary that they should be. What is wanted, is evidence concerning the best school practice in the land. That does not vary materially with the size of the community, but is much the same for all. Indeed, whatever advantages there are should accrue to the small city, rather than to the large one, for changes in it do not involve sums of money so large as to terrify even the progressive men who champion them. Moreover, it is a more manageable unit in school organization, dissatisfaction quickly makes itself known, mistakes can easily be remedied, and improvements are not difficult to introduce. School systems that minister to great masses of people are much more unwieldy. The schools of smaller cities must not, therefore, be content to take a place behind the larger cities but ought, themselves, to lead the very van of educational progress.

It is a pleasure to acknowledge the thoroughly courteous treatment I have received from everyone with whom I have had to do during the course of this examination. I take this opportunity to thank the Superintendent, and every teacher and principal in your department for the kindly way in which I was received and helped. On my part I have tried to make what must have been a trying ordeal for many whom I visited as light an infliction as I could. There is always grave danger that such an examination as I have been making may disturb and disorganize instruction unduly. I have tried to keep it from producing any such result in this case.

I have tried to make a constructive program for the development of a public school system such as I believe a prosperous and progressive community like East Orange should have. Much has been done already, but much still remains to be done to bring the schools to the highest pitch of efficiency. What is most needed is thorough co-operation of all concerned. I urge particularly the paramount necessity for the greatest frankness in all their relations on the part of the Board of Education, the Superintendent, the principals, the teachers and the patrons of the schools. The policy of the Board of Education must be known. The Superintendent should state his convictions upon all educational matters, and his reasons for them quite fearlessly. Teachers and principals must bring their difficulties to the Superintendent without any feeling of constraint. They are all parts, one of another, in the greatest of undertakings. I realize quite clearly that I have not dwelt upon the very great merits of what has been wrought patiently and persistently and conscientiously through the years, and I freely testify that what has already been done is of much greater moment than all that I have suggested for attention in the future. But the goodly educational structure which has been reared should be repaired here and there, and must be enlarged to meet new conditions and to house the growing conception of education.

## I.—Historical Sketch

The schools of East Orange were legally consolidated in 1889 and a Township Board of Education was elected. During the next year, however, the four schools of the township were allowed to continue as formerly in nearly all respects, and only a slight effort was made to establish uniformity or to bring them into an organic system. At the end of the first year a superintendent—the present incumbent—was appointed and a systematic effort was begun, looking to the complete unification of the schools into a well-graded system.

At the time of consolidation there were four school buildings as follows:

	Seating	Estimated Value
Ashland .....	672	\$55,000
Eastern .....	504	50,000
Franklin .....	336	38,000
Elmwood .....	168	17,000

The list, including lots, buildings and equipment—all at present value, with full allowances for depreciation—now stands:

	Seating	Value
*High .....	800	\$428,041 00
Ashland .....	714	156,137 07
Eastern .....	672	115,351 55
Franklin .....	714	94,732 58
Elmwood .....	588	92,305 09
Columbian .....	504	83,375 85
Nassau .....	652	86,795 68
Stockton .....	588	86,509 03
Lincoln .....	462	117,869 04
Washington .....	462	107,000 00
Two portable school-houses .....	82	2,310 42
Playgrounds .....		23,898 07
		<hr/> \$1,394,445 38

\*This includes the Board Rooms and equipment of same.

In 1890 it was decided to raise the standard of promotion from the schools and establish a well-equipped High School. Three pupils were graduated at the end of the first year.

The high school building erected in 1890 was designed to accommodate five hundred pupils. The field of high school work has expanded greatly since that time, and the building could not properly accommodate more than three hundred and fifty or four hundred pupils, if proper laboratories were provided. This building was comfortably filled ten years after its erection. Since that time conditions became continually less favorable to satisfactory work as the number of pupils increased.

A new High School building was completed and taken possession of in September of the present year. The total number of pupils that can now be accommodated is about eight hundred, but the finishing of some uncompleted space will provide satisfactory accommodation for from ten to twelve hundred.

The growth of the High School is shown by the following table:

Year	Enrolled	Graduates Full 4-year Courses	Year	Enrolled	Graduates Full 4-year Courses
1890-'91.....	159	3	1901-'02.....	480	51
1891-'92.....	154	8	1902-'03.....	464	33
1892-'93.....	182	10	1903-'04.....	479	55
1893-'94.....	237	23	1904-'05.....	470	47
1894-'95.....	205	14	1905-'06.....	482	45
1895-'96.....	230	23	1906-'07.....	554	72
1896-'97.....	330	53	1907-'08.....	601	84
1897-'98.....	374	20	1908-'09.....	627	64
1898-'99.....	449	32	1909-'10.....	712	79
1899-'00.....	486	64	1910-'11.....	716	87
1900-'01.....	470	59			

In 1890 the teaching force numbered forty-nine, with a salary roll of about \$37,000. There are now one hundred and eighty-seven teachers on the list, and the salary list, exclusive of clerks, janitors and others not engaged in teaching or supervising, is \$184,300.

The old Ashland School was sold and replaced by a new building. The Eastern, Franklin and Elmwood have been more than doubled in size and have been modernized in all essentials.

Every building is equipped with apparatus for forced ventilation and with sanitary systems connected with the sewers. In each building there is an assembly hall seated with opera chairs, and a fully equipped manual training room. Every pupil has a separate desk and a separate compartment or locker in the cloak room.

The yearly growth of the system, as shown by the total enrollment and the average belonging, is as follows:

	Total Enrollment	Average Belonging
1889-'90 .....	2117	1495
1890-'91 .....	2173	1706
1891-'92 .....	2350	1791
1892-'93 .....	2482	1866
1893-'94 .....	2645	2097
1894-'95 .....	2732	2202
1895-'96 .....	2929	2358
1896-'97 .....	3192	2545
1897-'98 .....	3280	2707
1898-'99 .....	3499	2812
1899-'00 .....	3744	3079
1900-'01 .....	4051	3284
1901-'02 .....	4214	3369
1902-'03 .....	4375	3539
1903-'04 .....	4414	3631
1904-'05 .....	4623	3765
1905-'06 .....	4851	3896
1906-'07 .....	4999	4145
1907-'08 .....	5340	4372
1908-'09 .....	5649	4762
1909-'10 .....	5870	5060
1910-'11 .....	5903	5108

The first office of the Board of Education and District Clerk was a small back room in a building facing the Brick Church sta-

tion. At the end of a year a small, unoccupied grocery store on Main street was secured and its one room served for nearly two years as Board Room, store room, and offices for District Clerk and Superintendent. In December, 1891, the High School was opened and two small rooms were reserved for the use of the Board and its officers. These offices were needed as recitation rooms, and in September, 1900, the Board moved into offices in the City Hall. In October of 1911 they went into a fine suite of offices in the old High School building.

## II.—The Community and the Efficiency of the Schools

East Orange is a city of 34,371 people. It has an assessed property valuation of \$49,982,929. Its tax rate for the year is 1.70 per hundred. It is a compact city with a total area of but four square miles. It is, too, a remarkably healthy community, for in 1909, the last year for which figures are available, its death rate was but 9.5, the lowest reported by the United States government in the vital statistics for that year. Its population is almost entirely American, and of a well-to-do class; extremes of poverty and wealth are hardly to be found. There is a relatively small colored population, but it too is of a prosperous, and fairly well-to-do sort. There are only a very few foreigners who have come to our country so recently that the schools must perform for them the double duty of teaching their children the English language as well as the fundamental arts which constitute an elementary education. In this respect the educational task of this community is much simpler than in many of its neighbors, where great numbers of children of other nations must be taught a new language and many of the ideas which lie behind American school instruction, as well as the specific subjects of the common school course which both those who know the language and those who do not must learn. In these respects East Orange is singularly fortunate.

But certain other features of its life do not make for educational efficiency in the same measure. The city is a suburb of New York. The major part of its citizens are business men, professional men, clerks, salesmen, etc., etc., in the metropolis. The town lacks unity; it is a fragment of a larger whole; is not complete in itself. The interests of its people are elsewhere; their social life is elsewhere. People come and go. Many make only a convenience of the place. Houses are rented, but homes are not established. What takes place in East Orange is of much less concern than what goes on in New York. There is bound to be an aloofness from local issues. People do not know each other, and do not work closely together for common ends.

Such a condition of things affects the schools vitally. East Orange is not a manufacturing city, nor is it a commercial town. It is a residence suburb, beautiful, healthy, rich. Its citizens leave their homes every morning to go elsewhere to their work. Its children leave their homes every morning to go to school with the notion deeply fixed in their minds (for it is inevitable that it should

be so), that the really momentous concerns of life are to be found elsewhere. Their minds are divided just as their parents' minds are. New York plays too large a part in their thoughts. This is the penalty which the suburban dweller must pay for his immunity from the confusion of city life. It is a very real penalty. The children in the schools are not less intelligent than they are elsewhere; they are more so, for they come of good American stock; but they are less interested in school work, and know less about the necessity which men are under to work for a living upon farms and in factories and shops, than if they were brought up in a community where all the features of a vigorous economic life were playing everywhere about them. For the most part they do not come to school with any very profound sense of the great importance of these things, and in the absence of these major interests of mankind from the foreground of their consciousness, the things which do go on under their eyes assume a disproportionate importance.

Complaint was made to me repeatedly by teachers that going to school and doing one's work well there was a thing of less importance in the eyes of many of their children than leaving school to attend children's parties held during school hours, or even staying at home in order to be fresh for social events to be held in the evening. I have no means of knowing how commonly the most important work of children is made to wait upon their social engagements, but mention was made of this fact so commonly that I am forced to regard it as a serious hindrance to the efficiency of the schools and a condition which the parents of the community should change if the best interests of the children are conserved.

From the beginning East Orange has taken pride in her schools and with money her people have supported them generously. But there is another kind of support which they seem to have withheld from them. They have built good school buildings, and paid good salaries to teachers and supervising officers; but after buildings were built and teachers put in charge, they seem to have thought no more about the schools than if they were factories or department stores. The education of the young is a family concern as well as a state interest. It used to be regarded as a religious duty performed by the parents themselves. When this became impossible, teachers were brought into the household to instruct the children under the eyes of their parents, and when at length the children were sent outside the home to public schools the parents followed them to support and encourage them in getting an education, and to lend such approval and assistance to their teachers as the weighty task of nurturing the little ones seemed to require; and this good old custom of concerning themselves deeply over all that happens to their children, or regarding it as a duty as well as a pleasure to be often present at their lessons, to know well the conditions that surround them, and to lend all the support and encouragement which their presence can supply, still moves the mothers, and the fathers too, of many communities to visit the schools which their children attend at frequent intervals and for a sufficient time to get acquainted with their teachers, their lessons, and their progress in their work. I have



never before been in schools where parents were so rarely found as visitors. The reply which teachers repeatedly made to my questions, "Do the parents of your children visit your classroom? Do you succeed in getting their support and assistance in the work you are trying to do for their children?" was "When a pupil takes home a poor report at the end of the month, his mother or father usually comes to see about it. They do not visit us much otherwise." But this is not satisfactory and the schools cannot do their best work without a heartier coöperation on the part of the homes than this. It is too much like thrusting the children to one side to make the most of the conditions they find there.

Again East Orange does not care sufficiently for its teachers. It pays them fairly good salaries, but beyond that its people concern themselves but slightly as to their welfare. The homes of most of them are in other places; living is high, and proper accommodations are not easily found. The teacher who comes to the community a stranger is too apt to remain a stranger. Few go out of their way to meet her and seldom are opportunities provided for making acquaintances beyond the circle of her own fellow workers. Only those who have been so situated as to feel the need for acquaintances, friends and companions, can know what a hardship it is to be thus shut off from them and thrust back completely upon one's self. Teaching is a work of spiritual radiation; only a contented, happy, and measurably successful person can generate the inexhaustible enthusiasm for knowledge which it requires. Surely the work which the teachers do is of sufficient importance to the community to cause it to be solicitous for their well-being, and to provide every opportunity for its teachers to live as full and rich a social life as is open to any class of its people. I am laying stress upon this point, for every superintendent of schools knows that the efficiency of the school system rises and falls with the condition of the teachers who perform its work of instruction. The community which allows their lot to be less tolerable than it should be will suffer automatically for its omission to care duly for the most important of its public servants.

Another difficulty is that the community has no industries of its own. Shall its schools, then (particularly its High School), train its young people for business, and for the professions by fitting them to go on to college, or shall it provide them as varied opportunities for training in several other lines as the well equipped high schools of industrial communities are offering? This question is not easily answered. But if the community trains its children to follow their fathers' occupations only, it will undoubtedly fail to provide the very opportunities which many of its young people need. Occupations are not hereditary, and no city lives so completely to itself that it can afford to provide a less complete opportunity for the training of its young people than its neighbors do. Even though the economic interests of their parents are along special lines, the education which is offered their children must be along many lines.

In this connection I recommend that a systematic effort be made to secure a larger and more active coöperation on the part of

parents who send their children to the public schools. This can be done in several ways: (1) By holding public meetings for the discussion of educational matters; (2) by organizing school patron's clubs, which meet periodically in the schools for the purpose of getting acquainted and becoming informed about school work; (3) by each school preparing an annual exhibit of its work and inviting all parents and citizens of its territory to an "at home" in the school house. This last method is particularly effective, for the children love to have their parents see their work, and seldom fail to secure their attendance at this school fête. Something of this sort is being done already, but it is not a general practice of all teachers and all schools as it should be. Suggestions as to the opportunities for training which the High School should offer will be made in a later section.

### III.—The Board of Education and the Efficiency of the Schools

Your Board has been perhaps a bit more anxious to get work done, than to get it done through the agencies which it, itself, maintains for the doing of it. This may have been necessary to expedite pressing business, but in one respect it is unfortunate, for it has worked a degree of demoralization in the teaching staff of the schools. Now, inasmuch as a school system is a very delicate and sensitive organization, exceedingly hard to keep in adjustment and very easily thrown out of balance, the proper systematization of school work is an exceedingly important element in determining its efficiency.

It is a principle of scientific management, that in every properly directed undertaking there shall be a planning department whose duty it shall be to know about all that is being undertaken and done, and to provide plans in accordance with the laws of science. Instead of the happy-go-lucky method of each man doing what he feels like doing and in the way which seems to him best, scientific management substitutes a thorough organization of work with minute subdivisions of labor.

First, there must be some one place where the system comes to a head, some one person must know about all that is being undertaken and all that is being done. This one person, who has the general oversight of the entire undertaking must arrange the work of each of his assistants so that the different parts of the undertaking will fit together as nearly perfectly as they can be made to, so that preparatory stages will really prepare and contributory agencies will genuinely contribute. The principles of scientific management apply to public school work just as truly as they apply to any other form of coöperative effort. But who is the one person, or which is the one department that must know about all that is being attempted and done? It cannot be the Board of Education for the Board of Education has not time to keep track of all that is going on; it is not "on the job" every minute. Neither can any one of its members do this for no one member has any legal authority

to do anything save as the corporation in charge—the Board of Education—sitting as a board in accordance with the established legal procedure, specifically gives him such authority. Again, if the work of the school department is to be thoroughly planned from beginning to end, so that in all its parts, in its buildings, in its financial arrangements, in its system of supplies, in its selection of janitors, physicians, teachers and principals, in its course of study and methods of instruction, etc., it shall be the most effective agency possible for the instruction of the young, there must be a planning department whose duty it shall be to provide plans for the proper functioning of all the different parts of the system. This planning department must be one department in which all the plans will be made to fit together, and it must be a department of experts. Can the Board of Education do this work? It is a board of laymen who sometimes have great difficulty in keeping from attempting to perform the work of educational experts, though they should have no more difficulty than a bookkeeper in recognizing the expertness of a carpenter, a carpenter that of a bookkeeper, or a client the advantage of the special training of his lawyer, or a patient that of his physician.

The one person who is “on the job” all the time, who can know about all that is being undertaken and whether it is being done in such a way as to serve the one ultimate interest of the undertaking and can make plans for the work of all his assistants, and watch their work from day to day, to see that it is being performed properly, is the Superintendent of Schools. The Board of Education meets at regular intervals, either as a whole or in committees to listen to reports of what has been done, to formulate rules for the conduct of the business, to pass upon plans that may be presented to it, ratify agreements, authorize expenditures, etc., etc. It performs the same function for the citizens that the board of directors of a corporation performs for the stockholders of the company. Just as the actual management of the corporation is, and must be, entrusted to a staff of expert assistants whose work is guided and directed by the executive officer, who reports to the directors and transmits their directions to his assistants, so must the work of a board of education be conducted, if the principles of scientific management are to be followed and the highest efficiency of the school system is to be secured.

### Suggested Changes in the Rules

I do not find that these principles have been sufficiently considered by your Board either in making its rules for conducting the business of the schools, nor in its day by day relations with them. The duties of your executive officer, the superintendent of schools, are not sufficiently defined, and the *Rules* do not give that office the functions it should have if the greatest educational efficiency is to be secured. Rule 23 declares that “the superintendent of schools shall act under the advice and direction of the Board and its several committees.” Inasmuch as the acts of the committees must be

authorized or ratified by the Board and the committees are appointed merely to expedite business, in order that the committees may not assume a larger authority than they possess, it would be better if the superintendent were directed by the Board itself. He should be required to attend all open meetings of the Board and its committees.

Your Committee on Teachers is authorized to recommend the employment of teachers, "after consultation with the superintendent." This is not enough; all nominations of teachers and principals should be made by the superintendent and the rules of the Board of Education should specify that no teacher may be elected who has not been nominated by the superintendent.

*Rule 13* declares that the course of study committee "shall have charge of the course of study in all schools in conjunction with the superintendent, and recommend such alterations and revisions thereof as it may deem advisable, and recommend such text-books and school accessories as it may believe best adapted to the wants of the different schools." Here again the superintendent should recommend and approve all textbooks, school accessories and all changes in the course of study before the Board should allow itself to consider the adoption of them. That the public business may be sufficiently safeguarded the Board of Education must observe a system of checks and balances in its own procedure.

*Rule 14* declares that the committee on schools "shall have jurisdiction over all matters involving school discipline and shall have general oversight over all school matters except such as are referred to other committees." Such jurisdiction over all matters of school discipline is meant, I take it, to be appellate and not original, but I think the rules should recognize the fact that the Superintendent handles all cases of school discipline until appeal is taken over his ruling to the committee of the Board.

*Rule 15* specifies the duties of the Building Committee, but does not require the written approval of the Superintendent of schools upon all plans for buildings or additions to buildings before contracts for the same shall be let; yet the school superintendent is a much safer authority upon the proper arrangement of a school house than an architect, for he has learned what a schoolhouse ought to be by using it, whereas the architect knows it only by building it or visiting it. The relation of the Superintendent to the High School should, I think, be specified by the rules of the Board; this matter has been a fertile source of difficulty in the past, and the bad effects of the lack of a proper adjustment are still hindering the work which the High School is trying to do.

### Need for Coöperation in School Business

I have not found that degree of coöperation between the several factors concerned with the administration of the schools which should obtain among them. The Board of Education has sometimes acted in very serious matters without, as I think, sufficient consultation with the members of its staff, who must carry out its

directions without sufficient preparation to do so successfully. The matter of self-government in the study rooms of the High School is a case in point. I do not think that the High School authorities can be blamed for finding it exceedingly difficult to save the day in this matter, for though the plan is a good one and must if possible be made to succeed, as it will be, yet, its accomplishment was made unnecessarily difficult by the haste and lack of preliminary preparation which marked its initiation.

### Recommendations

I recommend, therefore, a more thorough systematization of the work of the Board of Education, the Superintendent of Schools, the Principal of the High School, and the other officers of the system, and such changes in the rules of the Board of Education as may be necessary to specify the functions and responsibility of each somewhat in detail, in order that there may no longer be any confusion of offices or misunderstanding of responsibility. No other recommendation which I can make will do so much to bring peace and harmony into school work nor to promote the energetic efforts of teachers who feel troubled and insecure because they do not know what the future policy of the Board of Education may be.

## IV.—Cost as Related to the Efficiency of the Schools

### A Comparison of the Cost of Public Education in Montclair and East Orange

The State Superintendent of New Jersey has defined the "Cost of Education" in his report for 1909 as follows: This term ("current expenses") as defined in section 95 of the school law includes principals', teachers', janitors' and medical inspectors' salaries (though not specified in the law, it necessarily includes also salaries of superintendents and supervising officials); fuel, textbooks, school supplies, flags; transportation of pupils; tuition of pupils attending schools in other districts with the consent of the Board of Education; school libraries; compensation of the district clerk, of the custodian of school moneys and of truant officers; truant schools, insurance, and the incidental expenses of the schools.

A very careful investigation of the cost of the public schools of Montclair and East Orange made by Mr. Howard Greenman whose report bears date of March 17th, 1911, supplies the following summary of school expenses for the year ending June 3d, 1909.

Table A

Current Expenses (Excluding Manual Training)	Amount Expended		Per Capita Cost Based Upon			
			Av. Enrollment.	Av. Attendance		
	Montclair	E. Orange	3008 M.	4725 E. O.	2839 M.	4520 E. O.
Teachers' salaries...	\$119,043.20	\$138,217.50	\$38.43	\$20.25	\$41.93	\$30.58
Fuel and Janitors' salaries.....	14,311.87	22,340.26	4.62	4.73	5.04	4.05
Textbooks and apparatus.....	11,485.00	9,870.32	3.71	2.09	4.04	2.18
Other school purposes.....	16,374.45	4,964.49	5.28	1.05	5.78	1.10
Total current expenses or Cost of Education.....	\$161,214.58	\$175,394.63	\$52.04	\$37.12	\$56.79	\$38.81

Other items must be added which change these totals somewhat,—as the cost of manual training which was \$8.32 for each pupil taking it for Montclair and \$4.14 per pupil taking it in East Orange. Mr. Greenman estimates the total excess per capita cost on daily attendance in Montclair over East Orange as \$24.45, and explains this marked difference in cost between the two systems in the following way:

"In both places there seems to be a custom to increase salaries year by year, and the average of length of service of teachers in Montclair exceeds that of East Orange by about 12½ per cent. Hence a correspondingly higher average salary might reasonably be expected. A more important item, however, is the fewer average number of pupils assigned to one teacher in Montclair. Indeed this is the most marked point of difference and materially contributes to the increased per capita cost in Montclair both in teachers' salaries and in the expenses incidental to the resulting factors of larger quarters per pupil.

"Another significant feature is this: You will observe that the average cost of educational salaries increases with the age of the pupils, being lowest in the kindergarten and highest in the high school. The percentage of total scholars attending the lower grades in East Orange exceeds Montclair's percentage, but as the grades advance, the proportion is reversed, and in the high school Montclair's percentage exceeds that of East Orange. This variation in distribution of pupils in the various grades will have the effect of increasing the per capita cost to Montclair, for evening schools, summer gardens, open air schools, school nurse, truant officer, high school gymnasium, supervisor of manual training and maintenance of three manual training buildings goes to increase the cost of Montclair, for the reason that no corresponding expense is incurred in East Orange as they do not maintain similar branches or positions."

Taking the estimated excess per capita cost of Montclair over East Orange as approximately \$24.45, the distribution of that excess over various items would be about as follows:

1. Fewer average number of pupils assigned to each teacher in Montclair, approximately.....	\$9 80
2. Expense incurred in Montclair for departments, etc., that do not exist in East Orange, summer gardens, open air school, school nurse, truant officer, high school gymnasium, supervisor of manual training and maintenance of manual training buildings, etc., approximately..	4 55
3. Larger quarters per pupil in Montclair, involving larger expense for janitors, heating, etc., approximately..	2 80
4. Additional expense incurred in Montclair for manual training, where a greater number of subjects are taught and more time is devoted thereto, approximately..	2 00
5. Additional expense incurred in Montclair for administrative salaries, approximately.....	1 40
6. Larger percentage of attendance in Montclair in the higher grades .....	95
7. Higher average salaries paid to teachers in Montclair, approximately .....	85
8. Additional expense incurred in Montclair for supplies, approximately .....	65
9. Remaining or miscellaneous expenses coming under fifty-one headings and amounting in the aggregate, to approximately .....	1 45
Estimated total excess per capita in Montclair, based on average attendance .....	<u>\$24 45</u>

## A Comparison of School Expenditures Here and Elsewhere

General comparisons of the cost of school systems are of necessity quite inexact because the same things are not compared, yet they have a suggestive value, though not a final one. The figures of the census of 1910 supply the following:

Table B

Total expenses of schools per capita of population.

City.	Population.	Cost, per capita.
East Orange, N. J. ....	34,371	\$8 04
Newton, Mass. ....	39,806	8 39
Hamilton, Ohio .....	35,279	5 49
Elmira, N. Y. ....	37,176	3 80
Berkeley, Calif. ....	40,434	9 90
Los Angeles, Calif. ....	319,198	7 19
Detroit, Mich. ....	465,766	4 52
Chicago, Ill. ....	2,185,283	5 87
Boston, Mass. ....	670,585	6 43
Newark, N. J. ....	347,469	7 80

It will be noted that the cities of Newton, Berkeley and East Orange are similar in respect to size and character as each is a suburban city with a population of superior grade, considerable wealth and anxious to maintain good schools.

The per capita of the total expenses of schools, based on enrollment were as follows:

Table C

City	School enrollment	Per Capita expense
East Orange, N. J. ....	5,870	\$47 28
Newton, Mass. ....	7,212	46 32
Hamilton, Ohio ....	4,686	41 35
Elmira, N. Y. ....	5,138	27 54
Berkeley, Calif. ....	6,753	59 29
Los Angeles, Calif. ....	52,058	44 09
Detroit, Mich. ....	56,927	37 19
Chicago, Ill. ....	334,564	38 34
Boston, Mass. ....	131,300	32 79
Newark, N. J. ....	57,742	46 94

The number of pupils per teacher on the basis of the total number of pupils enrolled for the year:

Table D

City.	Enrollment	Teachers	Pupils per teacher
East Orange, N. J. ....	5,870	166	35
Newton, Mass. ....	7,212	372	19
Hamilton, Ohio ....	4,686	151	31
Elmira, N. Y. ....	5,138	168	30
Berkeley, Calif. ....	6,753	189	35
Los Angeles, Calif. ....	52,058	1,307	39
Detroit, Mich. ....	56,927	1,500	38
Chicago, Ill. ....	334,564	6,383	52
Boston, Mass. ....	131,300	2,848	46
Newark, N. J. ....	57,742	1,327	43

While these figures are unsatisfactory in that the tables from which they are constructed are perhaps not exact, and they are averages based on total enrollment, the most variable of all items in school reports, yet as the total enrollment is used throughout, the trend of averages which is shown has value. It will be seen that the state of affairs in East Orange compares very favorably with the other cities in each of the tables. The comparison of school expenditures with Montclair is greatly in favor of East Orange, and this comparison with the expenditures of other cities shows that she is not spending a smaller amount of money than they are on the education of her children. But while it would not seem to be desirable to expend as much money for instruction as Montclair is spending, the comparison with that city is valuable in that it does call attention to certain items on which East Orange must expend more money if the best results are to be obtained.

No evening schools are maintained, and the population is of such a character that perhaps few would attend if one were opened. School gardens are a necessity if the best kind of nature study work is to be done, and they should be provided. The need for an open air school should be decided by the Superintendent and the school



physicians. A school nurse is hardly necessary there. A truant officer is already employed. Very satisfactory gymnastic work is being given in the High School, though a gymnasium must be fitted up there. A supervisor of manual training is now at work. Manual training shops are to be found in each elementary school. The average number of pupils per teacher on the basis of the average attendance, according to Mr. Greenman's figures, was 27.8; that is not too high a number for effective work. The classification sheets which I have collected do show overcrowding in some rooms, but this condition will be relieved as soon as teachers can be found. East Orange had a population of 21,506 in 1900 and 34,371 in 1910, which in part accounts for the larger percentage of primary school children there.

To me by far the most serious feature of this comparison is the fact that the average period of service of teachers in East Orange is  $12\frac{1}{2}\%$  less than in Montclair, being 6.1 years there, and 5.4 years in East Orange. Superintendents and principals are all agreed that the schools suffer because teachers cannot be retained. This is a condition which besets every suburban school department. If it is wise in consulting for its educational welfare it will not permit itself to be made into a training school or a recruiting station for the larger school systems which are its neighbors. It has an initial advantage in being a more pleasant place in which to teach than they are. With this beginning it could easily make its salaries so satisfactory that teachers would rarely or never go elsewhere to teach. Good teaching is worth just as much to East Orange as it is to Montclair, Newark or New York. The cost of living, too, is high. The city should not allow its schools to be handicapped in any measure by lower salaries than its neighbors pay.

## V.—A General Survey of the Schools and Their Efficiency

### School Buildings

East Orange has eight elementary schools and one high school. All are housed in commodious and substantial buildings, and some in the beautiful and well-arranged new buildings of the most approved type which East Orange has been erecting in recent years, than which better school plants could hardly be found anywhere. Each of the schools has a capacious assembly room and is most fortunate in the possession of it. It enables each principal to bring his entire school together whenever he finds it desirable to do so; that is a splendid thing; the size of the company as they sit down together gives each pupil a sense of the importance of the undertaking in which they are engaged. The unity of the company is secured and school spirit with all its advantages of enthusiasm, pride, mutual helpfulness, seriousness, etc., follows. There is no more profitable lesson of the day than that which the pupils get by sitting together in the opening exercises.

I want to commend, too, in the highest terms the persistent efforts and the good taste which principals and teachers have put

forth in ennobling and beautifying their school rooms and school halls with the best available pictures and sculpture. It was the conviction of one of the wisest of teachers that youth should be nurtured in pleasant places in the midst of refining surroundings, in order that the breezes of health and beauty might blow over their souls and gently and unconsciously harmonize their lives, and win them to the true beauty and orderliness which are the object of all our striving. Your teachers and principals are trying to provide such surroundings and to make their school rooms places meet for the dignity of education which will effectively foster and augment the aspirations of youth. All have succeeded in a marked degree, but some more than others. At the risk even of making an invidious comparison, I should like to say that your Columbian school has the best school decoration that I have ever seen.

### Fire Protection and Repairs to Buildings

The buildings are not all as convenient as they should be and the fullest measure of protection against fire has not been provided, though when the work of reconstruction which is now going on at the Eastern school and at the Elmwood school is completed a much greater measure of security will have been attained. It seems too bad that this work of reconstructing school buildings should go on while the schools are in session, for it interferes greatly with school work. It should all be done in the summer time. I am told that the failure of the city authorities to allow money for it in time is the reason why the community must now lose through its disturbing the work of the children. If the authorities concerned will not prevent such unnecessary and easily avoidable waste of the time and energies of children, the laws should be changed to prevent it. Although it is not easily measured in dollars and cents the community is suffering a very real loss,—and it is not a small one,—because this work was not done at the right time. But even when it is completed, your schools will not be as free from danger by fire as they should be. The Elmwood school has a hallway too narrow and too obstructed for safety. The appropriation which was asked for to make it a safe place for the children should not have been refused and the Board of Education must not allow the matter to rest until this danger is removed. Again, I find one or two doors which open inward instead of outward in the classrooms of several of the schools. They can easily be changed, and as they stand present a very grave danger to the children. Fire drills are held regularly and principals and teachers are observing such precautions as they can to protect the children.

### Bad Ventilation

Neither the heating nor the ventilating of the elementary school buildings is satisfactory. Perhaps they cannot be made satisfactory, for in spite of the large claims of vendors of heating and ventilating apparatus, science has not yet devised a method for the proper ven-

tilation of school houses; but they can be more successfully ventilated than they now are. It has been calculated that foul air destroys 75% of the efficiency of school work. A board of education anxious to increase the efficiency of its schools can wrestle with this problem to advantage. The school physicians which it employs to visit the schools will furnish conclusive evidence that conditions should be materially improved.

There are two things that may be done; one is to make the firms which have installed the apparatus which is now in the schools live up to their guarantee that it will supply pure air in the quantity needed; the other is to get apparatus which will more nearly do the work. Principals and teachers seem to be exercising due diligence in reading thermometers and adjusting drafts, but results are not what they should be.

## Playgrounds

Each of the elementary school buildings has large basement playrooms, but the school grounds of at least three of them are too small. Land could be purchased to enlarge the grounds of the Columbian school and it is needed there. More space would be an advantage at the Stockton school, and even the Ashland school could use more ground to advantage. The Franklin school has splendid large grounds, the Eastern and the Elmwood schools are well provided; the Nassau and the Lincoln schools are not badly off. The school grounds of each building should be provided with simple and inexpensive playground apparatus. Only a little of it is required in each place; but those school authorities who are convinced that the playground is more important than the school would insist upon having at least some playground equipment on the grounds of each school. East Orange has done well to provide a playing field for the pupils of her schools, and the Playground Commission is doing a commendable work there.

But the High School which is almost without any ground space save that on which the building stands must almost monopolize the athletic field, while the chief value of playgrounds to school children consists in having them right at hand to be used before and after school and during recesses, while the stimulus of momentary freedom from the necessity to stay indoors and the presence of the whole company of children make every one take part in the games and the exercise that are possible to them. Now that we are beginning to see that physical training is really more important than any form of mental training, we shall make more and better provision for it in every way that we can. The educational efficiency of a school system requires ample provision for playgrounds, just as certainly as it requires due attention to the teaching of reading, writing, and spelling. Unless it is providing these things in their proper measure, it is not as efficient as it can be made to be. East Orange is not behindhand as to playgrounds, but it can do more than it is now doing in respect to them. School gardens also are

an essential feature of the best equipped schools. They are not to be found here; yet nature study cannot properly be carried on without them, and they should be provided as soon as they can be.

## Equipment

It is generally conceded that the elements which in their proper combination make a school are, in the order of their importance, the teacher, equipment and building. Of these by far the most important is the teacher, and by far the least important is the building; and while a satisfactory equipment is less important than a good teacher, it is more important than the building. In point of equipment I would rate these elementary schools as fair. Of seats and desks, blackboards and maps, there are perhaps enough. In adjustable seats, well adjusted to the needs of the pupils there is room for improvement. Of books there are not enough. Readers should be supplied in sets made up of different kinds of books, as well as of the same kinds of books. The supplementary reading matter which is supplied to the higher grades is well selected and rich both in quantity and quality. Dictionaries should be much more common and more commonly used. I think it is not extravagant to supply an unabridged dictionary and a brief encyclopedia to each 5th, 6th, 7th, and 8th grade room.

The school libraries should receive more attention. In some schools there are many more books than in others, and in some much more use is made of books than in others. School libraries should either be built up by the Board of Education or an arrangement should be made with the City Library to furnish books to each school, and the principal and teachers should foster and systematize their use by the children. Every elementary school should habituate every grammar school child to the use of dictionaries, encyclopedias, and of books other than textbooks, both for the information they supply and for the pleasure they afford.

Supplies are furnished with promptness and in reasonable quantity; their quality does not always give satisfaction to those who requisition for them. This difficulty, though not now serious, could be entirely removed if the supervisor who uses the materials should supply standard samples of supplies needed before the goods are bought.

## Protection of Health

Of the High School we shall speak in another section. There are certain other general features of the school system which may be discussed here. The health of the school children is a matter of the gravest concern to all progressive boards of education and to the communities which they represent. Ample provision has been made for the physical examination of each child in the schools. These examinations are conducted by a staff of competent physicians. They are made each year, and the results are entered upon a cumulative record card which has spaces for the health record

of each child for his entire eight years of school attendance. Contagious diseases are carefully watched and the condition of eyesight, hearing, teeth, lung and heart action, are carefully tested. If conditions are found that require medical attention, the parent is at once notified to take his child to a physician. All this is admirable. There should, we think, be a closer following up of all such cases to see, if possible, that the proper relief from disease is provided in each case. The proper measures will, of course, be taken in most cases, but not in all, and if the schools are to do their best service for the children they will do all in their power to get good health for them.

It is not unreasonable to go a step further than they now go and in addition to notifying parents, to request them to report back to the school that action has been taken in each case and to follow up the report of each child who is in need of care until it is given. Quite properly the school should not do any prescribing. This suggested following up does not involve anything of that sort.

The system of medical examination is not as complete in the High School as it should be. Reference will be made to it in a later section.

### Physical Training

Physical training of a very satisfactory sort and under the direction of an able supervisor is being given in all the schools. Games are being played in the school rooms, and setting-up exercises are given. Every child is being taught to breathe, sit, and stand properly. Great interest is being taken in this work and it is certain to be abundantly successful. It would, I think, be improved if it were given in all the schools, as it is given in one of them (the Lincoln) where the children, instead of going into the hallways where the air is not likely to be of the best, open all the windows of their classroom and take their exercises practically in the open air. As this lesson is given at the same time in every room of the building, nobody is disturbed by the exercise. Free gymnastics without apparatus offer the best forms of healthful exercise. Gymnasiums and apparatus are not necessary, perhaps not even desirable, in elementary schools. This work should go forward with the same enthusiasm with which it is now being conducted. A male instructor organizes the athletics of the higher grammar grades, and supervises a system of inter-school games. This is excellent and good results are certain to come from it.

### The Hours for Little Children

But the school system is not conserving the health of its children in all ways. Some of its requirements are positively harmful to them.

The transactions of the Royal Sanitary Institute of Great Britain report a study, tabulated by Mr. Clement Dukes, showing how much work may safely be put upon a growing child. Its results are as follows:

Table E

Ages of pupils.		Hours of work per day	Hours of sleep per night
From 5 to 6 years	.....	1	13½
" 6 " 7	.....	1½	13
" 7 " 8	.....	2	12½
" 8 " 9	.....	2½	12
" 9 " 10	.....	3	11½
" 10 " 12	.....	4	11
" 12 " 14	.....	5	10½
" 14 " 16	.....	6	10
" 16 " 18	.....	7	9½
" 18 " 19	.....	8	9

Pupils under five years of age attend one session of the kindergarten in East Orange. "Other pupils except those barely five may attend both sessions when the numbers will permit" (Course of Study, p. 13). Except in rare cases no child who has reached the sixth birthday is admitted to a kindergarten. The Rules and Regulations prescribe that "kindergarten and first year classes may be excused at 11:30 a. m. and 2:45 p. m." Seventy-five minutes is the time per week allowed for recesses, according to the time table; hence, four hours of work per day is provided for children from 5 to 6 years of age and the same amount for children of from 6 to 7 years of age; while those from 7 to 8 attend for four and one-half hours. This is too much work for little children, and the hours of confinement under school discipline are too long for them. Sleep and free play are more important to them than so much schooling. The State law, I am told, is in part responsible for this long school-day, but the law does not require full time attendance of little children; and if it did, a better distribution of time would enable them to omit the last wearying hour of the day. The researches of Jung and Freud are beginning to show us how overwhelmingly important the nature of infantile experience is. The crises of life, they maintain, are to be found in its earliest years. All wearing and vexatious disturbances must be removed from them if after life is not to be distorted.

Again, there is little warrant for assuming that there is any intellectual advantage derived from either early attendance or long hours for little ones.

### Home Study Required of Grammar School Pupils

The same considerations apply in some measure to the length of the periods of required home study in the grammar grades. Regular home study is, in one respect, a desirable thing, but the one hour and one-half required of seventh grade students, and the two hours per day required of eighth grade students, seem to me to prolong the school day unduly and to make the working hours of children nearly as long as those of adults, leaving too little time for free, random reading, or for the multiplicity of concerns which youth must initiate and carry on for itself. The day is a split day, too, and the studying required must be done in the late afternoon or evening.

The papers which were submitted in the English test constitute a most interesting and suggestive document on the child life of the city of East Orange. They bring to our consciousness the wide world of action in which the children grow, outside of school walls and hours. An imposing list of activities is mentioned, from playing with dolls and dominoes, to cleaning the cellar and chicken coop, and delivering groceries. Very frequent mention is made of moving picture shows, choir practice, music lessons, housecleaning, and sewing schools. One young sixth grade hero rescued a baby from a burning crib, and with fine presence of mind put flour on its body. Many of the children are already making Christmas presents. No one can read these papers and believe that children are naturally lazy; and the net impression is that overpressure of the American city school child is not an altogether imaginary danger. One feels that the boys and girls ought to have more real leisure and freedom and surely on Saturday. Leisure is a great educator. The children should have time for their own original devices, games and expeditions; and for the undirected, spontaneous library reading which the returns clearly show they enjoy. This leisure time is already too much invaded by piano practice, sewing schools, theatre, shopping, etc. The school surely should not further encroach upon this "free time."

But it does. In a great many of the returns, the children make records like the following: "Then I did my homework and went to bed." "I did my homework to have Sunday free." This "homework," which apparently is an accepted part even of the child's Saturday is schoolwork,—it is grammar, arithmetic and spelling. Sometimes this homework is mentioned in connection with sleepiness. "We had supper and I studied my lessons for one hour and forty minutes. Then my brother asked me some questions and said I had to study some more. Finally I grew tired and went to bed."

Here is the way a 5th grade boy started the day: 7:15—Got up and made his own bed; 8:15 went to choir practice; 10-12 went home and studied school lessons and Sunday School lessons.

This sort of thing means *pressure*, and with nervous children it spells *overpressure*. There are, of course, a good many children who manage to have a care-free day of healthy play out of Saturday; but the school should not be guilty of adding to the burden of the serious and overconscientious children who suffer both from school study and home study.

The whole trend of educational hygiene, not to say legislation, is toward the abolition of home study. The practice in East Orange of expecting  $\frac{3}{4}$  of an hour of homestudy from 5th graders, 1 hour from 6th,  $1\frac{1}{2}$  hours from 7th, and 2 hours from 8th, can be safely condemned. First of all, the nervous systems of children are already sufficiently endangered by poor ventilation and insufficient sleep. Pedagogically the practice of assigning home work fosters the undesirable American process or policy of *lesson setting* and *lesson hearing*. "*The German teacher teaches*" it has been said; *but the American teacher hears recitations*. There are special evils in homestudy; "Tendencies to deception, slovenly work, formation of habits of

carelessness, dawdling, error and confusion." Dr. Friedrich Schmidt of Germany made an experimental study of the relative merits of home and of school study in children as old as 12 years. Even at this age he found homework strikingly inferior in results, especially in arithmetic, where there were about 300 errors in home exercises to 200 errors in school work. Dr. W. H. Burnham, a leading American authority in School Hygiene, after a conservative, critical study of the problem concludes "The safe rule would seem to be that no homework should be prescribed, but where this seems desirable, suggestions for spontaneous work may well be given."

In California "homework" is forbidden by law. Zurich also forbids it absolutely, and many European cities carefully limit the conditions under which it may be permitted. The International Congress of School Hygiene at Nuremburg, favored a resolution advocating its abolition. A decided modification and curtailment or complete abolition of home study requirements in East Orange would undoubtedly be beneficial to the children, not only on Saturdays but on school days too.

Most educators would, I think, agree that no child under seven years of age should go to school more than once a day, or for more than three hours a day; and that no child under twelve should be in school more than five hours a day, or take any assigned work home for study in the evenings. After that age a limited amount of home work may be required. It should perhaps never exceed an hour in the case of elementary school pupils.

## Two Types of Schools

There are two kinds of schools following two different conceptions of education. According to one kind the great thing is knowledge. It is stored up in books, in courses of study and in the minds of teachers and other learned folks. The purpose of school keeping is to retail it to children; to pass it on from the places where it is to the places where it is not. That it may be passed on easily it must be prepared in little carefully molded cubes or accurately weighed doses. This is the work of textbook makers and of manufacturers of methods. Teaching, according to this view, consists in seeing to it that the young child takes the proper number of pellets of knowledge every day and the object of the recitation is to find out whether or not he has done so. Since what he has taken is knowledge in its essential form, he must retain it in the form in which he took it. To see that he has done this and is continuing to do it, there must be periodical inspections of his stock of knowledge. These are called examinations. They occur at regular intervals, since the amassing of a fixed amount of knowledge and the retention of it in its original condition is thought to be necessary before one can safely amass further knowledge. To summarize: The object of education, according to this view, is knowledge. The business of teaching is to put it where it is not. Text-books are to provide it. Recitations are to find out whether or not



it has been taken. Memory must retain it, and examinations must be given to test the knowledge state of pupils. Since knowledge is the one thing needful, the quantity of knowledge which can be compressed into the memory of a school child becomes a matter of vast importance. Courses of study are written chiefly, in many cases, to indicate the quantity which every good retailer of knowledge must succeed in lodging in the memory of each child. To cover the prescribed amount of work is the mark toward which the teacher is made to press, and toward which she is usually, in such a system, overpressed. That the superintendent and the principals may know that teacher and pupils are handling the required stint of knowledge, that teachers may know that pupils are stocking themselves with it and retaining it in undiminished state, that parents may be assured that their children are amassing the fixed heaps of prescribed facts, that the children themselves "may know how much they know," great reliance is placed upon examinations. They are given with great regularity, their results are carefully tabulated. As soon as one is over, everybody settles down to preparing for the next one. Children are weighed and measured by them, are encouraged or discouraged, are promoted or demoted, by them. This is called an examination system of schools. All that it does is necessary, but by no means as necessary as it conceives it. All that it does is important, but by no means so important as it regards it.

The other kind of school looks upon knowledge, not as a fixed thing, but as a useful tool which men have shaped because they need it in living. It is not at all finished or final. Men made it by thinking and men will improve it by thinking, and before anyone can use it or any part of it he must remake it through his own thinking for himself. What Moses thought, or Plato thought, or the maker of the arithmetic thought, will never do me any good, until I think it for myself. The great thing then for this school is not knowledge, but learning to use one's mind upon matters which men have found to be important by using their minds upon them. Textbooks are important because they suggest to us some things which are important to think about. Courses of study try to do the same thing by picking out certain matters to think about longer and harder than others, and giving suggestions as to ways of thinking. Teachers are important because they stimulate us to think by surrounding us with problems and reasons for solving them, and such help in going about the matter in profitable ways as we stand in need of. They help us to look at things, and study things, and talk about things, and repeat things and understand things, and memorize things that can best be thought about in these ways. And from time to time as may require, and to make themselves better acquainted with the success which we are achieving in our thinking, they set specific pieces of work for us to perform and examine our success in performing them with somewhat greater care than they can give to our day by day thinking. The number of textbook or course-of-study things that we think about in this kind of education is not so important as is the number of things we try to get in the

other kind; but the kind of thinking that we do is much more important.

In the first kind of school everybody is hurried, teachers have to make children learn much more than they can possibly make them learn, while children have much more to study than they can possibly understand, and many more things to do than they can possibly do well. Because everybody is hurried, short cuts are taken; things are not talked about that ought to be talked about at length; words take the place of thoughts; memory is made to do much that intelligence ought to perform. Habits of divided attention are developed. The use of the mind which ought to be the most pleasant of all occupations becomes wearisome and repellant. The word *school* means *leisure*. The men who invented it gave it that name and until pressure is removed from it, it simply cannot perform its work.

### The Tendency at East Orange

Neither of these kinds of school ever exists in a pure state; as we know them they are only tendencies. The question which we must ask in valuing any school system, is, which of these tendencies is uppermost in it. I have no hesitation in saying that more of the first than of the second is to be found at East Orange in the elementary schools. They tend to put results before processes. Neither teachers nor pupils are quite free enough in their work. Carrying out the instructions of the Course of Study, in detail, claims too much of the energy of the teachers. There is not enough time for individual work. Covering a certain amount of ground overtaxes the pupils; examinations have too large a place in everybody's mind. The reading of examination papers and the making of too frequent reports occupies too much of the time of those who teach, and fixes the minds of children too intently on the book-keeping aspects of school work. To succeed in an examination becomes more important to them than to comprehend a subject. Report cards are sent home so frequently that parents seem to be absolved from the necessity of knowing anything else about the schools.

In short, I think the emphasis is put in the wrong place. Examinations play too large a part; too much written work is given; the examinable features of a subject get more than their share of attention. Records are kept of failures that ought to be forgotten in the light of subsequent atonement. Standards of marking vary so extremely that much injustice can hardly fail to be done.

What concerns the Course of Study will be found in another place.

### Recommendations

In this connection I would recommend a shifting of emphasis from an examination system to a system which uses examinations more as incidental features of its work. The regularity of the monthly tests should be broken up. Teachers should be expected to

give as frequent reviews as the nature of the subject matter studied demands; and such written lessons from time to time as the necessities of good instruction may require; but these lessons should not be featured as of more significance than they are, and they should come at irregular times. Formal examinations are serviceable when not too numerous, and should perhaps be given at the end of each semester, but as they are valuable chiefly in providing a need for a thorough review of the work of the term and a bringing together of the parts of the study which is being pursued, and for the training which they give in meeting a difficult and not unfamiliar emergency; all should take them, and other methods should be employed to keep the deportment of students at or above 85%.

The daily-work mark will serve its purposes best if it is not entered daily but kept in mind until one is quite certain that it is correct. The monthly mark will, I believe, serve best if it is the teacher's estimate on the basis of oral and written lessons and deportment of the fact that the pupil is among the best in the class, or among the next best, or among the third-class students of the subject. As the daily work is the main thing in a school, a student with good daily work and a poor examination is still a good student; whereas one with poor daily work and a good examination is a poor student. The examination from the standpoint of the pupil should be just one of the significant lessons of the course. It should not count for a half in his rating; perhaps for not more than 10% in his term's work. Tests which are intended to keep superintendents, principals and teachers well informed as to the success or failure of their teaching should be given at irregular times, as often as need be, to provide this information; but since they reveal the success or failure of the teaching and not the present worth of the pupil, the pupil should not be rated by them; but the teaching should be corrected and the pupils' work estimated only after the defects of the teaching have been eliminated.

## The Duties of Supervisors

One fertile source of confusion, worry and overwork to the teachers in a school system is due to the failure on the part of the board of education and of the superintendents to fix the limits which supervisors of special subjects must observe in their work. This office of supervisor is a somewhat anomalous one. The executive and administrative control of the work of teaching is entrusted by the board to a superintendent and a corps of principals, but a staff of supervisors of special subjects, such as primary reading, music, drawing, gymnastics, primary manual work, writing, etc., are constantly going from school room to school room and each presses the teachers to give more attention to his special work than is being given, and to get better results in it, etc., etc. Here is a new administrative authority which is usually rather too independent of superintendent and principal to function successfully in an administrative role. The duties of supervisors must be carefully defined. They are teachers of teachers in special subjects. They should go

about explaining the best methods of teaching their subjects, giving model lessons, stirring up enthusiasm, etc.; but as they belong to the instructional and not to the superintending staff, it should be clearly understood that they have no authority to give orders as to the amount of work to be done or to rebuke teachers for not doing it, or to rate teachers in their work, or in any way assume these functions of superintendents and principals. Whatever suggestions they have to make along these lines should be made to principals and superintendents and by them to the teachers whose work is in question. What I have said here is not a criticism of the work of the supervisors, but does, I think, point to a regulation which should be introduced to keep their work from interfering with that of other officers of the system.

### Tenure of Office Law

There is one other feature which does not yet, but will in time, tend to lower the efficiency of the schools. I refer to the State tenure of office law. Security in office during good and efficient service is something which all interested in the public schools pray earnestly for, but lodgment in office for life is quite another matter. It is practically impossible to prove professional incompetency in court; and places where teachers can appeal to the courts for final review of adverse action against them by boards of education and are practically never dismissed, have poor schools. Such tenure of office is good for the clerk, but bad for the work. They should of course have the right to demand a public hearing, but it should be conducted by the board of education, not by a court. The best kind of tenure of office is that which an enlightened public demands and insists upon for its teachers. Both teachers and people are unfortunate in having any other kind.

### How Pupils are Promoted

The superintendent's statement of how promotions are made is as follows: "We have annual promotions, but in all rooms up to the seventh grade we have two sections, one of which is capable of moving a little more rapidly than the other in the heavier subjects. In all first year rooms there are three sections of different advancement. In all cases pupils are moved from one section to a higher or lower section as their progress merits. These changes are constantly being made. There is no fixed limit for the year's work in first, second, or third year grades. Each section advances as far as possible, consistent with thorough work. After the third year limits are more closely adhered to and a somewhat modified Cambridge plan is followed."

One of the *Regulations* reads: When failures stand against a pupil in studies equivalent to two daily studies extending through a year, he shall be placed in the next lower grade, but no pupil shall be kept in a grade longer than two years. Pupils thus passed to higher grades shall not thus secure entrance to or graduation from the High School.

Demotion is such a serious tragedy in the life of a child that the utmost effort possible must be made to prevent it. It is clearly the intention of all the school authorities to make this effort. Even so, I think more could be done than is now being done. The quantity of the work done should not be the determining consideration; the ability to profit by the work of the next grade should be. There should be more time for individual work with backward pupils. In the more serious cases home conditions should be looked into and the heartier coöperation of parents secured. Special examinations by the school physicians sometimes locate special physical causes of the backward condition. The tests in spelling and arithmetic show scattered cases of marked deficiency. Very often this deficiency is in one subject. These children call for special attention and individual instruction. There are usually ascertainable reasons for their lack of success. The fact that arithmetic claims the greatest number of the specialized laggards is significant.

The provision for special instruction in ungraded classes is most commendable. The "uneasy class" for pupils who find the reasonable orderliness of their classrooms too irksome relieves the busy teacher of the "one bad boy" who in some systems is such an effective agent in reducing the efficiency of all about him.

The special class for mentally atypical children in charge of a teacher specially trained for her work at Vineland is a good feature which may be copied with profit elsewhere. The "backward classes" are doing a good and necessary work. Another class (ungraded) for children who do not fit well into the groups where they are, in some cases for temperamental reasons, in others because of loss of courage, would be a desirable addition. It would not only make their success more certain, but make that of the rooms from which they are taken more possible.

### Retardation

The age and grade classifications submitted by the principals of all the elementary schools give the following results as to the number of pupils in their normal classification and the number out of it.

Age and Grade Classification

Table F

AGE → GRADE ↓	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Totals
Kidney	112	246	44	1											403
1		68	309	163	37	7	4	1							589
2		1	51	236	191	53	20	6							558
3				44	190	156	69	32	13	4					508
4				1	50	155	155	93	62	25	11	3	1		556
5						19	142	167	96	69	33	14	3	1	544
6							25	76	126	102	48	29	2	1	409
7								20	46	83	54	42	16	—	261
8								5	19	86	86	63	17	5	281
Totals	112	315	404	445	465	390	415	400	362	369	232	151	39	7	4109
Special classes		1	6	9	5	4	6	18	13	3	6	4	1	—	76

Table G

Percentage of Elementary School Pupils Over Age and Under Age in the Public Schools of East Orange

Grade	Normal Age	Over Normal Age					Under Normal Age
		1 Year	2 Years	3 Years	4 Years or more	Totals	
K'dgtn.	99.8%	0.2%	.....	.....	.....	0.2%	.....
1	80.1%	6.3%	1.2%	0.7%	0.1%	8.3%	11.5%
2	76.5%	9.5%	3.6%	1.1%	.....	14.2%	9.3%
3	68.1%	13.6%	6.3%	2.5%	0.8%	23.2%	8.6%
4	55.8%	16.7%	11.1%	4.5%	2.7%	35.0%	9.1%
5	56.8%	17.6%	12.7%	6.0%	3.3%	39.6%	3.5%
6	49.4%	24.9%	11.7%	7.1%	0.7%	44.4%	6.1%
7	40.4%	20.7%	16.1%	7.1%	.....	43.9%	7.6%
8	61.2%	22.4%	6.0%	1.8%	.....	30.2%	8.5%
*1-8	63.8%	15.3%	8.0%	3.5%	1.1%	27.9%	8.1%
*1-8	2367	567	297	131	41	1036	303

\* NOTE.—Exclusive of kindergarten.

NOTE.—Normal age is taken as 4-6 for kindergarten; 6-8, 7-9, 8-10, 9-11, 10-12, 11-13, 12-14, and 13-15 for grades 1, 2, 3, 4, 5, 6, 7, and 8, respectively.

Table H

From the U. S. Bureau of Education, Bul. No. 5—1911

(Inquiry of December 1908)

Elementary Grades.							
Boys.	54.4%	20.6%	11.8%	5.9%	2.1%	40.4%	5.2%
Girls.	57.7%	20.9%	11.5%	3.7%	1.6%	37.7%	4.6%

This comparison of age and grade conditions in 1908 with conditions as they are now shows that much improvement has been made in three years. The over normal age figures are still much too high. They are somewhat due to the fact that the town is adding to its population by people moving there from other places. "We find ourselves badly affected by the fact that we have a large floating population," writes the superintendent. "Our requirements seem to be higher than most of the newcomers are accustomed to, and this results in repetition of grades and the raising of the age average. This is especially true in second, seventh, and eighth grades, but is serious throughout the grammar grades." It seems to us to be so serious as to require a change in the course of study, more individual work and perhaps new types of schools for certain upper grade pupils.

Table I

The following table shows the results of the midyear examinations 1910-11 in the five grammar schools having graduating classes:

School	Subject	No. in Class	No. Excused	No. Examined	No. Failed	Percentage	Percentage
						Failed of Whole Class	Failed of Examined
—Entire Graduating Class by Schools—							
Ashland	Arith.	55	14	39	17	31	44
	Geog.	55	27	28	3	5	11
	Gram.	55	12	43	11	20	26
	Hist.	55	29	26	2	4	7
Eastern	Arith.	70	14	56	6	9	11
	Geog.	70	28	42	3	4	7
	Gram.	70	19	51	6	9	12
	Hist.	70	39	31	6	9	20
Franklin	Arith.	41	32	9	6	14	67
	Geog.	40	29	11	2	5	18
	Gram.	41	29	12	1	2	8
	Hist.	40	27	13	0	0	0
Columbian	Arith.	44	20	24	2	5	8
	Geog.	45	17	28	4	9	14
	Gram.	45	15	30	12	27	40
	Hist.	45	19	26	5	11	19
Nassau	Arith.	70	19	51	8	11	15
	Geog.	70	24	46	10	14	21
	Gram.	70	33	37	13	19	35
	Hist.	70	42	28	4	5	14



Table J

The following shows the results of final examinations, grammar schools, June, 1911:

School	Subject	No. in Class	No.	No.	No.	Percentage Failed of the Class	Percentage Failed of Examined
			Excused —EIGHTH GRADE—	Examined	Failed		
Ashland	Arith.	28	12	16	1	4	6
	Arith.	26	15	11	1	4	9
	Geog.	54	36	18	2	4	11
	Gram.	54	19	35	0	0	0
	Hist.	54	28	26	1	2	4
	Spell.	54	24	30	3	6	10
Eastern	Arith.	41	22	19	0	0	0
	Geog.	41	30	11	1	2	9
	Gram.	41	26	15	0	0	0
	Hist.	41	29	12	1	2	8
	Spell.	40	27	13	2	5	15
Franklin	Arith.	41	36	5	0	0	0
	Geog.	41	22	19	2	5	10
	Gram.	41	31	10	1	2	10
	Hist.	41	34	7	2	5	28
	Spell.	41	18	23	0	0	0
Columbian	Arith.	45	21	24	0	0	0
	Geog.	45	23	22	2	4	9
	Gram.	45	18	27	2	4	7
	Hist.	45	25	20	5	11	25
	Spell.	45	19	26	2	4	8
Nassau	Arith.	24	6	18	10	42	56
	Arith.	40	26	14	2	5	14
	Geog.	24	3	21	3	13	14
	Geog.	40	25	15	0	0	0
	Gram.	24	6	18	4	17	22
	Gram.	40	28	12	0	0	0
	Hist.	24	4	20	6	25	30
	Hist.	40	27	13	0	0	0
	Spell.	24	2	22	1	4	5
	Spell.	40	20	20	1	3	5

Table K

The following table shows reasons why pupils left school during the year 1910-11 to June 1st, 1911. Totals for all elementary schools:

# Reasons Why Pupils Left School During the Year 1910-11 to June 1st, 1911.

Totals for all Elementary Schools.

Reason Grade	Went to Work		Poor Health		Moved Away		To Private School		Dropped to Lower Grade		Sent to Special Classes		Promoted		Behind		Died		Social (Colored)		Totals
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
8th.	3	2	1	5	8	12	1	1	1	1	..	..	..	..	..	1	..	..	..	1	37
7th.	3	4	..	4	13	18	..	2	8	4	..	..	1	..	..	..	..	..	..	..	57
Adv. 6th.	2	..	..	2	9	5	..	1	1	4	1	..	1	..	..	..	..	..	..	..	26
6th.	6	1	..	9	9	13	1	4	6	4	2	..	2	5	..	..	..	1	..	..	63
Totals.	14	7	1	20	39	48	2	8	16	13	3	..	4	5	..	1	..	1	..	1	..
Totals.	21		21		87		10		29		3		9		1		1		1		183

## VI.—The Teachers and Their Work

The Regulations governing the certification of teachers prescribe that candidates for the principalship of primary and grammar schools must hold the diploma of an approved college or state normal school and have had a successful experience of at least two years. Candidates for positions as primary and grammar school teachers and special assistants must have had a successful experience of at least one year and must hold the diploma of an approved college, state normal school, or city normal school, a first grade New Jersey county certificate, a New Jersey state certificate—received by examination—or a first grade state certificate received by examination in another state, the certificate system of which has been approved. Candidates for positions in the High School must hold the diploma of an approved college or university, and have had at least one year's successful experience. Candidates for positions as kindergarteners must be high school or normal school graduates and must hold the diploma of an approved kindergarten training school in which the course of study covers at least two years. They must have had at least one year of successful experience. Candidates for positions as assistant kindergarteners must be graduates of a kindergarten training school. These are the written qualifications; the unwritten ones are much higher.

The Superintendent of Schools is constantly gathering information about unusually promising candidates for membership in his corps. He finds out what he can as to their training and success in teaching, then he visits them in their class rooms, sees how they work. When a vacancy occurs he is usually able to nominate a thoroughly trained and competent person to fill it. This important duty could not, I am sure, be more conscientiously and carefully performed. As a result the personnel of the teaching company in East Orange could hardly be improved upon. It is unfortunate that men teachers are not to be found in any of the upper grade class rooms, but unless they were as capable as the women who are now there they would not be an element of strength. The principals of the elementary schools are an exceptionally able group of men. Their attitude toward the children under their care could hardly be better than it is, while their considerate and kindly leadership is a constant source of strength to their teachers. I am of the belief that their duties are too much detailed for them, and that they are not left free enough from the necessity of making reports and of teaching classes a fixed number of hours per week to become as familiar with the instruction which is being given in their schools as they should be. The principal of a twelve-room school is directed to teach regularly not less than 400 minutes, nor more than 500 per week. This is very nearly a third of the entire school time and while this required amount is considerably less in the case of principals of larger buildings, it is still too large, and rather too definitely fixed to allow the best results. The principal is the captain of a ship, the commander of a station, and he should be entirely free within wide limits to use his own discretion in administering his

command. He should be accountable for what goes on in his jurisdiction and to be accountable he must be put largely upon his own resources. General principles must, of course, be laid down, but ways and means must be left almost entirely to the local commander. This is so delicate a matter that it is never an easy one for a superior officer to adjust.

One trouble with boards of education almost everywhere is that in their eagerness to perform all the duties of their office they perform many duties which for the real good of the undertaking should be performed by the educators whom they employ. The same excess of zeal makes superintendents perform more than their share of administrative work and leave too little for their principals and teachers to decide and adjust. And principals too are too apt to arrange everything for their teachers and leave too little to their initiative. While the great and besetting sin of teachers, which as yet only very exceptional ones escape, is to teach too much. I have tried in another place in this report to show that this tendency is due to a mistaken notion of what knowledge is and to a conception of education that follows from this mistaken notion. No one person is to blame for it and school systems throughout the whole country suffer from it. It is hard for boards of education and superintendents and principals and teachers who are thoroughly in earnest to keep from doing more than their own work, yet a democracy of effort is best and one of the precepts which administrative officers must remember is to let the other fellow do his part. His freedom is essential to his welfare. To over-systematize his affairs for him is quite as bad for his development as not to systematize them enough. This is peculiarly true of educational work; of teaching in which the participation of minds in due measure is the one essential thing.

I have dwelt upon this point at length for the majority of the teachers in the elementary schools of East Orange are doing too much teaching, not too little of it. The pupils are doing too little studying and thinking, and too much getting of lessons and reciting. A systematic effort on the part of all concerned should be instituted to correct this tendency. Study classes for teachers should be formed by the Superintendent and the principals. Such excellent books as McMurry's "How to Study and Teaching How to Study;" Strayer's "A Brief Course in the Teaching Process;" and Dewey's "How We Think," should be read and discussed by all. These books and others like them contain the best discussions of the teacher's work which we have. Nobody who follows this profession is exempt from the need to know what they contain. If objection be made that the teachers already know how to teach and should not be asked to learn more about this subject, we would reply that nobody knows how to teach,—that it is the finest and most difficult of all the arts; that as yet nothing more than a beginning has been made in the science of education; that no teacher not even the most successful can fail to profit by what others have thought and said about his calling; that "nothing is worth doing that is not worth thinking about" all the time, continuously, and education least of all.

The discipline of the schools is good. Everybody works hard and very few seem to be inclined to interfere with the work of their neighbors. In going into the class rooms of all the buildings I did not see one serious act of disorder. This good condition is due to home training, to the seriousness of the work and the personality of the teachers. Repeated admonition is required to get good "position," but not to get good order. The "uneasy class" helps greatly and is a wise provision. The children are acquiring habits of courtesy and consideration which will serve them well through their lives.

Table L

### The Enrollment by Schools and the Distribution of the Teaching Force

School	Total Enrollment	Average Belonging
High School .....	716	656
Ashland School .....	670	602
Eastern School .....	574	495
Franklin School .....	747	660
Elmwood School .....	836	666
Columbian School .....	597	511
Nassau School .....	674	595
Stockton School .....	632	540
Lincoln School .....	457	394
	5903	5119

There are this year 186 in the teaching force, besides the superintendent:

Kindergarten .....	16
Primary .....	57
Grammar .....	48
Special assistants (one in each primary and grammar school—general helper and substitute and coach).	8
Special, slow, first year classes.....	2
Special, backward class, 1st to 3d years.....	1
Special class for slow children of the 3d and 4th years	1
Special "Uneasy class" for boys, 3d to 7th years inclusive .....	1
Primary and grammar principals, (male.).....	8
High School Principal .....	1
High school teachers (not including manual training.)	27
Manual Training	
Woodwork .....	{ 2 men 2 women
Arts and Crafts .....	
Sewing .....	2 "
Cooking .....	2 "
Music supervisor .....	1
Drawing	
Supervisor .....	1
Assistant .....	1
(These also teach freehand drawing in the High School)	
Physical training .....	{ 1 man 1 woman
Penmanship (half time) .....	
First year primary supervisor .....	1 "
(This teacher, Miss Herron, acts as a regular teacher of first grade during four days of the week).	

## VII.—The Course of Study and the Teaching of the Several Subjects in the Elementary Schools

A new course of study is needed and is being prepared. There are certain considerations which I think should be kept in mind in making it. The course of study is not a demand made upon the members of a teaching corps by the school authorities. It is a co-operative formulation in outline of the task which they purpose to undertake. Everyone concerned should have a part in the making of it,—the parents, the teachers, the principals, the superintendents, and finally the board of education. Not only should opportunity be given to each one to express his views upon what should go into it, but each one should be brought to feel that he has a duty to express his views. Not all these views can find a place in it when it is drafted, but everyone of them should be taken into account in the making of it. The superintendent and the principals must study what is being done elsewhere and supply most of the course; and they must reduce it to its final form; but they must use the knowledge of parents and teachers in constructing it, else it will not embody the best thought of the community as to what should be attempted in its schools. To make a course of study in this way is a long and hard undertaking. It should be a special order of business for not less than an entire year. In some measure this method has been followed.

Again the course of study should not attempt to tell in detail what is to be taught in each subject nor to give more than an outline of the methods to be used. It should indicate the larger subject-units to be treated and something as to the best methods of handling them. Beyond this it should not be prescriptive, for it is the teacher who must do the teaching, and if teaching is to be an intellectual work it must allow plenty of room for the selection of matter to be considered and the choice of method to be followed. Unless the teacher is an agent with discretion, teaching becomes merely carrying out orders—a mechanical and not a stimulating and vivifying work. On the other hand, it is necessary that the undertaking be sufficiently systematized to be a definite one. An outline by subject-units of the minimum amount of work to be done by each grade is required, and in fixing this minimum account should be taken of the fact that children's diseases and other interferences keep pupils from school a certain number of days each year, so that a minimum amount of work should be fixed which can be performed without undue effort in the time which remains after the normal period of inevitable absence is subtracted from the whole number of teaching days in the year. It is the quality of the work which counts, not its quantity. It is not a fact that the course of study contains too many subjects, but it is a fact that it commonly requires too much work in each subject to allow for the degree of thoroughness that should be achieved.

Almost with one accord teachers protest that they have not time to perform their work as they would. In the high school it is

the requirements of the colleges which keep them from teaching as they would; in the elementary schools it is the amount of work prescribed by the course of study. This is manifestly wrong and a change should be brought about. There must be a selecting of principles, ideas, and ideals to be taught. Fundamental matters should have the right of way over subsidiary matters. As much time should be taken as is required to do all that is done well; then what remains to be done can well be left to the well-trained person which the pupil has become, to perform if need be in his after school life. This is certain: that the teacher who is under bondage to the course of study, or who leans too heavily upon it, is not performing the full functions of a teacher. There are certain changes in school work which I should like to present for the consideration of the superintendent, principals and teachers of East Orange.

The first concerns the kindergarten; would it not be better not to allow any kindergarten children to attend for more than a half-day, and to eliminate all prescribed primary school work from its course of study? The experience of other communities confirms this view, and the new knowledge which we begin to have as to the importance of freedom from undue constraint in the first years of childhood ratify it.

There is no printed timetable which tells exactly how it is suggested that the time of teachers and pupils be distributed to the several subjects. Instead the timetable printed in the course of study which bears date of 1908 was handed to me with a supplementary note which reads "Time for manual training increased in all grades. In eighth grade this becomes 90 minutes per week." Arithmetic and geography correspondingly reduced; history and grammar somewhat reduced in the eighth grades; the latter to give more time to composition. I have therefore put down 40 minutes for manual training in the first four grades, and subtracted half of it from arithmetic, 10 minutes from writing and 10 minutes from "poetry and science;" and have increased the time for manual training in the 5th, 6th, and 7th years to 50 minutes, taking 10 minutes from reading in each grade. In the 8th grade 50 minutes is added to manual training making 90 in all, and 25 minutes of that I have subtracted from arithmetic, and the rest from geography. This does not give the distribution exactly as it is made, but it is near enough for purposes of comparison. The time table thus changed stands as follows:

Table M

Subject	1 Year	2 Year	3 Year	4 Year	5 Year	6 Year	7 Year	8 Year	Total
Arithmetic.....	180	230	230	230	250	200	200	175	1605
History.....						160	160	160	480
English:									
Spelling.....	75	175	175	100	100	75	75	75	850
Grammar and Composition..	75	100	100	130	190	240	240	240	1315
Reading.....	450	350	350	300	190	110	110	120	1980
Geography.....			100	150	200	160	160	135	905
Writing.....	65	90	90	90	75	60	60	60	590
Drawing.....	60	60	60	60	80	80	80	80	560
Poetry and Science	80	95	95	90	80	80	80	80	680
Calisthenics.....	50	50	50	50	50	50	50	50	400
Music.....	60	60	60	60	60	60	60	60	480
Opening Exercises	50	50	50	50	75	75	75	75	500
Recess.....	75	75							150
Dismissal.....	50	50	50	50	50	50	50	50	400
Manual Training..	40	40	40	40	50	50	50	90	400
Totals.....	1320	1425	1450	1450	1450	1450	1450	1450	11,445

Unaccounted for, 15 minutes in the first year and 50 minutes in the fourth.

Table N

Per Cent. of the Total Instruction Time Given to Each Subject  
in Rochester, Indianapolis and Kansas City 1907-8,  
Cleveland 1908-9, and East Orange

Subject \ City	Rochester	Indianapolis	Kansas City	Cleveland	East Orange
Reading.....	17.77	17.80	14.50	26.31	19.16
Spelling.....	5.28	5.33	10.70	5.94	8.22
Grammar.....	2.39	2.16	1.00	3.63	12.72
Language, Composition and Supplementary Reading.	7.98	18.03	11.20	12.18	
Writing.....	5.08	7.86	9.66	5.73	5.70
Arithmetic.....	18.60	11.97	15.10	16.40	16.40
Geography—History.....	16.95	9.66	14.10	9.36	13.40
Music.....	4.79	6.85	6.60	5.46	4.65
Drawing.....	4.78	9.45	11.50	4.91	5.42
Manual Training.....	7.83	2.16	3.00	4.73	3.87
Physical Training—Physi- ology and Hygiene.....	6.57	8.65	4.00	5.31	3.87
Elementary School Science.	1.99	.....	3.11	0.00	6.58
	100.01	99.92	104.47	99.96	99.99



An inspection of the table shows that the subjects of instruction in East Orange are much the same and receive much the same attention as in the other cities whose courses are given. This is the conventional American school course. Progressive cities are breaking away from it. They are beginning to give less time to reading and arithmetic, more to history, geography, and manual training and industrial work.

## History

Going back to the school time table, we note that history is begun in the 6th grade. It should be begun much earlier. Much of the story telling of the second and third grades should be about the beginnings of our country. The children should get their first accounts of the nation's great men and their great deeds from the lips of their teachers; afterward they may read these stories; but it is in the nature of things that at first they should hear them. In the people's schools of Germany the instruction in the history of the Fatherland throughout all grades is oral. The course of study should give a suggested list of such stories, some of which may be read as well as told by the teachers. In the fourth year this work should get more attention. Such books as McMurry's *American Pioneer History Stories* may be put in the hands of pupils to be read in school. Such subjects as "Henry Hudson and what he did," "The Early Dutch Settlers," "Champlain and His Explorations," "The Five Nations," "La Salle and His Hardships" may be looked up and reported by the class. In the fifth grade a well selected introductory history may be used. It should be a story-telling account of men and deeds. I have found it highly profitable to put a simple course in general history into the sixth grade. Such a book as Niver's "Great Names and Nations" may be read and talked about. So many children leave school at the end of the elementary course, that it seems desirable to make them more acquainted than we now do with the greatest names and events of the world's history. Much reading can be done in connection with this course and it will be found to be useful in many ways. It is to be hoped that the elementary course of study prescribed by state authorities will be liberal enough to permit it to be given. United States History can be studied intensively in the 7th and 8th grades. It should treat large formative movements, social institutions, and national and municipal activities and lead to an elementary understanding of the civic and social life of our country.

## Arithmetic

An intensive study of arithmetic is prescribed for each of the eighth grades. It is generally conceded that the essential part of arithmetic can be taught in three years, though it is contended that it cannot be retained if taught only for a short time as if studied for a longer period (D. E. Smith, *The Teaching of Arithmetic*, p. 77.) From the tests made by Dr. Rice, of 6,000 children in the

schools of seven cities, he concluded that "there is no direct relation between time and result" as factors of successful work in arithmetic. Mr. Stone in his *Arithmetical Abilities*," summarizes his conclusion upon this point in these words: "Insofar as these twenty-six systems are a representative measure, there is very little relation between arithmetical abilities and time expenditure in present practice. Many systems are wasting time on arithmetic. They not only do not afford a rich life to the child, but they do not afford him abilities in arithmetic." The question is still an unsettled one but it would seem that arithmetic is not a necessary study in the first grade and perhaps not even the second. At any rate, some school systems are getting excellent results from five years of the study of arithmetic, and some even from four. The total time given to this subject at East Orange is not excessive as compared with some other schools and excellent results are attained, but the question remains, is it necessary for the pupil to make such a large outlay of time upon this subject to obtain a thoroughly satisfactory knowledge of fundamental processes and useful knowledge? It used to be thought that teaching arithmetic made the mind stronger to grapple with any subject. Now it is known that teaching arithmetic teaches arithmetic and little else.

Then, too, there is grave danger of making children mentally stale by keeping them repeating a subject after its parts are familiar to them. Would it not be better in place of stretching arithmetic over eight years to compress it into five or at the most six? We recommend that it be begun not earlier than the middle of the second year, and that the arithmetic of that year be largely a work of counting and measuring objects, writing figures and making combinations of numbers up to six. Addition, subtraction, multiplication and division constitute the fundamental processes of arithmetic. There should be a daily drill upon them in every classroom from the third to the eighth grade. The combinations should be learned and repeated in rapid oral drills such as I have seen given almost perfectly in one of the schools, until every pupil has attained both speed and something approximating complete accuracy in handling them. The speed and vivacity with which this work is done has much to do with the pupils' mastery of the subject. Beyond skill in fractions, both common and decimal, a good knowledge of percentage, familiarity with the tables which are most commonly used, and a practical acquaintance with mensuration, there is but little of first rate importance in arithmetic unless commercial practice is taught. The course of study should furnish a judicious selection of subject matter in this study. There is perhaps no other one with the exception of grammar where selection is so necessary.

To test the relative accuracy pupils of in the 5th, 6th, 7th and 8th grades in performing the fundamental operations the Superintendent at my request asked that an arithmetic test be given in all the schools. The problems sent out were those given some years ago by the Educational Commission of Cleveland, Ohio. They are as follows:

1. Add	1,234,567 8,910 23,456 789,101 234 56,789 210,978 3,456 78,123 432,987 65,432
2. Subtract	9,832,184,567 3,219,383,574
3. Multiply	38,798,640,209 76,039
4. Divide	26,544,332 by 394

The children were required to prove their answers before handing their work in.

The results of this test are shown for the whole city in the accompanying tabulation. There is a decided uniformity in percentage averages for the different schools, indicating that the children the city over, attain substantially the same standard of accuracy. An analysis of the results by grades proves that there is very little increase in accuracy in addition and subtraction from the fifth grade up. Improvement is more marked in multiplication and division.

The subtraction example  $\begin{smallmatrix} 9832184567 \\ 3219383574 \end{smallmatrix}$  may be considered the fairest test of accuracy. A compilation of the results in one school building (The Franklin) showed that of 218 pupils, there were only 10 pupils who made a mistake in the reckoning. The averages for the whole city in this test were 96%, 97%, 98%, and 99% for the successive grades V, VI, VII, and VIII. This is a creditable record. The results as marked by the teachers on the basis of column not absolute accuracy are as follows:

### Results of Arithmetic Test. Averages for All Schools

School	Grade VIII.				Grade VII.				Grade VI.				Grade V.			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Eastern....	96	100	95	97	98	100	96	100	97	99	93	91	88	99	82	80
Elmwood...	..	..	..	..	95	97	89	88	94	99	90	93	77	97	77	75
Franklin....	97	100	95	96	94	99	91	93	90	99	91	89	91	99	84	84
Columbian...	96	100	97	99	95	100	96	97	90	97	92	91	89	98	78	87
Nassau.....	89	99	91+	91	92	99	88	88	95	99	87	91	94	98	81	78
Ashland....	92	99	92	90	97	99	91	92	76	96	83	80	80	97	79	80
Lincoln.....	91	99	93	96	97	93	88	95	89	94	82	87	78	87	67	75
Average..	92	99			95	98			90	92			85	96		

The following test in business arithmetic, also taken from the report of the Cleveland Educational Commission was set for eighth grade pupils.

"Harry Clifton bought of James Armitage goods as indicated below. The clerk who sold the goods and made the memoranda misspelled some of the words. The bookkeeper corrected these errors in making up the account, and you are expected to do the same. The memoranda showed the following charges.

1 March, 2 dozen Oranges at 45 cents a dozen; 2 March, 2 pecks of apples at 35c a peck; 3 March, 2 cans of punkins @  $12\frac{1}{2}$ c. each; 4 Mar., 2 gallons molassis at 55c a gall and 2 lb Butter at 33c a pound; 6 March 11 yards of callico at 7c per yard; 6 mar., 2 lb coffey at  $\frac{3}{4}$  of a dollar a pound; 7 Mar. 1 sack Sugar, \$1.18; 8 Mar, 1 gal. sirrup, \$1.00; 10 March. Pickels, 33c; next day, Cabbage, 12 cents. 14 Mar. Cheese 75.; 15 Bar. 3 lb Rasins at 15c a pound; ditto 2 ton soft cole at \$3.75 a ton; 16 March, paid in cash \$6.00 on acct; 17 March, 3 rolls wall paper @ 17c a roll 20 March, 3 hours plummers time at 50 cents an hour; 25 March, 1 refrigerator, \$20.00; 27 March, 1 sponge, 37 cents; last day of the month, 2 doz. lemons at 16 cents a doz.

Write out the itemized bill, using the ordinary form, for the above, showing the amount due on account and receipt the bill.

The making out of a bill is a test that should appeal to a business man who desires to see the schools make a closer connection with life. This test demands the rendering of a simple grocer's bill. These bills were all drawn up by eighth grade pupils, and from pupils of this age one should expect good results. The papers are almost uniformly legible, neat and clean. Neatness is a venerable and valuable school virtue; but frankness tempts me to say that these bills are neat *to a fault*. There was, of course, a very natural desire to make them presentable, but in the business world, bills are not written out with the painstaking efforts and leisure which characterize these school room bills. Without intending any petty criticism of a characteristic which is not peculiar to East Orange it may be said that when the schools attempt to duplicate conditions of the outside world, they should not only remotely imitate them. Instead of spending ten, fifteen or twenty minutes in making out a simple bill of eleven items, the teachers should put a premium on *dispatch*. It would be much better pedagogy for the teacher to say, "The customer is waiting. Take your transfer paper and make out this bill and a duplicate in three minutes." That does away with uneconomical repetition and elaboration. Teachers should not allow child after child to write out completely the name of the month eleven times. March needs to be written only once, at the head of the column; ditto marks even are superfluous. Speed and abbreviation belong to the business world. Many of the children did not abbreviate at all, or only randomly. Children should be taught to abbreviate and to use the very simplest abbreviations. Most firms would prefer dz. to dozs. for dozens, and present practice approves the omission of the unnecessary period after the abbreviation. These are trifles, but they count up and make the difference between a businesslike and a schoolgirlish bill. One pupil wrote 35 unnecessary words and figures in a bill otherwise acceptable. While the bills were uniformly neat and tidy, there was not one bill of model business simplicity.

## Spelling

As a test in spelling all the pupils of the 5th, 6th, 7th, and 8th grades were asked to write an account of what they did on last Saturday. The spelling as shown by these compositions of about a thousand pupils is very satisfactory. The test was a fair one; it demanded that the children spell correctly words such as they would naturally use in writing a letter. One per cent was deducted for each misspelled word. *The percentage average for 24 sets of papers from as many rooms (V, VI, VII, VIII) is over 98%.* Excluding the relatively few bad spellers who made most of the errors, the score would be still nearer the hundred mark. This seems to mean that nearly every school child in East Orange above the 5th grade can write a letter of full page length with a probable spelling error of one or two words. This is an excellent record and a good answer to the favorite criticism that children no longer know how to spell.

It must be said, however, that there are several possible reasons for this good spelling. Available statistics and experiments show that spelling is only partially the result of much formal drill, and that an excessive, wasteful amount of time is usually devoted to the subject. It should not be given as a special subject in the first grade and until children have made a beginning of writing under careful instruction, written spelling should not be required. Less time may be given to spelling if the lessons are confined to words which are in everyday use, and the teacher goes over the lesson with the pupils before they begin to study it. The spelling lesson for the day might be written upon the blackboard in the morning as well as confined to the book.

## Reading

All classes in reading are taught according to a single method, and as it is well carried out the children learn to pronounce words even difficult ones very rapidly, and can soon repeat the words on a page. What I am not so sure of is the thought-getting side of their reading. It is said that they must learn to overcome the mechanical difficulties before they give much attention to the thought in what they read. That is like teaching a child to talk before he is allowed to say anything. Reading without due attention to thought undoubtedly leads to habits of divided attention. Facility in work naming may advance, but facility in thinking and using books properly must suffer. I think the good results which are now gotten could be made better by more talking about what is read. There is much too little of that, I am sure. It is a good practice to have one child read to the others sometimes, and for the others to be without books that they may listen to what he reads. It is an advantage to supply sets of books even to little children, no two of which are alike, as well as sets of similar books. Even first grade pupils like to try their powers on new books and to read a book privately by themselves. Such sets of irregular books need not be primers or readers, but real books in simple language which tell an

interesting story. The problem of reading is not to teach a child how to read, but to teach him to read. That is a much larger undertaking, and requires teachers to help their pupils to get books, to coöperate with the public library.

They must assist in the formation of habits of using and loving books beyond the list of textbooks. Good readers in the upper grades are rare, yet the art of reading aloud is a fine art which we would do well to cultivate vigorously. The spiritual training of the voice, which Professor Corson championed so earnestly, is a rich schooling of the understanding. It should have a large place in elementary schools.

## Writing

The accounts of "What I did last Saturday" were examined for penmanship, as well as for spelling and composition. The handwriting is legible and neat. It does not have enough movement, vitality, or individuality. There is rather too much copybook symmetry and uniformity in it. It is pretty writing, rather than good writing. The outward form is emphasized, rather than the process which should be used. But it is the correct movement that we are after nowadays, and the correct movement is being taught at East Orange, and well taught. I have never seen better and more satisfactory lessons; but I have watched the same pupils at their written work in other subjects and have not been able to find many who were using the method of writing which they had practiced in the writing class. There is, I think, too much written work called for in the lower grades. Written work on paper should be postponed in as far as it can be, until some proficiency in writing has been attained. Too much written work is required now in all grades, and as a consequence it is not done according to the methods which are taught in the writing class. Consequently good and well-established habits of writing are not formed. Only enthusiasm and energetic and untiring leading on the part of teachers will teach writing in the elementary schools as well as it is now taught in some business colleges.

## Geography

The present tendency among educators is to give more time to the content studies, among which geography and history are the most important. The organizing principle in geography is the interdependence of social life. Our own city and its activities, what we make and exchange with other people, and what they exchange with us, how location affects our doings and their doings, how commodities are taken from the places where they are grown to the places where they are used, what government does to assist us in living, what other governments do and how their people live, are generally recognized as the main things to which all the others are tributary in this elementary study of man and his ways of using the things of this world and associating with his fellow beings in a

coöperative life. It is well to begin this large and valuable subject in the third grade as is now done. Even before that simple stories of men's work should be told. The occupation work of the kindergarten may be very profitably extended through the second and third years. Of drill in locational geography in the middle grades there must be a great deal, but it might be of places and their significance, and not of names of places merely. This drill work must have enough meaning to make it interesting and instructive.

## Music

This is the oldest and one of the most important studies in the schools. It is important because certain ideas about life, home and country must get into the soul, or rather must grow out of the soul, and be rooted deep in the emotional being of each one of us. It exists and always has existed to express the deepest things that are articulate, as well as to be "the voice of the unutterable." The technical work in music is well done, but I question if there is enough singing of simple songs. If music is taught in the elementary schools not to make musicians, but to give certain ideas an imperishable value, we can well afford to reduce the work in technical music in order to give such songs as have the greatest meaning a satisfactory place.

## Drawing, Manual Work, Sewing, Domestic Science, Etc.

The work in freehand drawing is done well. It should have a larger place in the elementary grades. Writing can yield time to it to advantage. More work in design should be given. Primary manual work should be increased in amount and variety. The best primary schools carry kindergarten ideas well on into the lower grades. The work in sewing is very satisfactory. It is thoroughly practical and teaches valuable lessons of self-help, and capacity to the very ones who should have them. Its incidental lessons are of great worth. Manual training in woodwork should and will be built up. It should be taught primarily for its utility. Elementary lessons in the proper use of tools are just as necessary for the understanding of human affairs as elementary lessons in any other subject. There is need for some instruction in mechanical drawing to accompany this work in the 5th, 6th, and 7th grades. Cooking centers with full equipment should be provided in the elementary schools, and all girls of the 7th and 8th grades should have thorough instruction in that subject.

## Elementary Science

Descriptive nature study is now given. An elementary knowledge of soils, crops, and plant, tree and animal life, should be sought also. School gardens would make this possible. Physiology and hygiene should have more attention. Good textbooks now exist which make this an interesting and profitable study. "This is the

time," says Prof. Perry, "say at the ages of eleven to thirteen, when boys ought to have a course of experimental science, weighing and measuring accurately, learning the rules of mensuration, taking specific gravities, learning something of barometers and thermometers, of magnetism and currents of electricity."

### Grammar and Language Instruction

It is hard to persuade school authorities and teachers that formal grammar is not a proper elementary school study, but the results which are gotten from it are entirely out of proportion to the time which is spent on it. Technical grammar should be confined to a few, a very few of the essential relations of thought. It should never be a study of words and sentences alone, but of thought as it is expressed in sentences. The common errors in form can be overcome if proper care is taken in the early grades. Miss Myra King has published a little book on Language Games for little Children, whose use is making the more difficult forms a matter of second nature.

Written composition in the primary grades should be reduced to a minimum. Oral composition may be increased to a maximum. More time should be given to oral composition in all the grades. A very practical knowledge of letter writing, punctuation, commercial forms, etc., should be sought and should be made habitual in the upper classes. Oral language is much more used in life than written language is, and should receive a correspondingly larger attention in school. As a test in English, spelling and writing, all the pupils of the 5th, 6th, 7th, and 8th grades were asked to write a somewhat full account of "What I did last Saturday." These papers show that their young authors are acquiring the fundamentals of written language and sentence structure. They do not show much ability in selecting special themes or items for amplification, and are chronologies rather than histories of a day. Some few show literary merit, but most are lacking in accounts of the nature of the "good time" which their authors almost with one accord had. Their arrival at home "in time for supper" was an event which quite naturally impressed itself upon the minds of most of them.

### Ethics

I have found it of great profit to teachers and pupils alike to allot two periods of 15 minutes each per week in each grade to conversations about matters which children and adults alike regard as ethical; morals and manners must of course be taught in every lesson, but they should also receive separate attention. It is somewhat unfair to expect children to develop the virtues without taking pains to tell them what people outside the home as well as in it think about these matters. Our experience was that no lesson was looked to so eagerly as this one, and in no other class did the pupils tell their experiences or express their convictions so freely as in this. If the proper business of man is to be good, and "an unexamined life is not fit to be lived by any man" it would seem that the schools should



do their part in helping the children to make this examination of the conduct which all agree in calling good.

The subjects which were suggested for conversation, were *1st and 2d years*, cleanliness and neatness, politeness (of children), gentleness, kindness to others, kindness to animals, cruelty; *3d and 4th years*, review first and second years' work and discuss forms of kindness to others, love, truthfulness, fidelity, duty, obedience; *5th year*, review the 3d and 4th years' work, and discuss nobility, respect and reverence, gratitude and thankfulness, forgiveness, confession, honesty; *6th year*, in addition to a review of the 5th year's work, discuss honor, courage, humility, self-respect, self-control; *7th year*, review the work of the preceding year, and discuss prudence, good name, good manners (youth), health, temperance, evil habits; *8th year*, review the work of the preceding year, and discuss bad language, evil speaking, industry, saving money and charity, patriotism, civil duties.

### Current Events

Twenty or thirty minutes per week should be given to an oral report by the pupils in the upper grades on the most important news of the week. This will be stimulating and valuable in many ways.

According to this plan the chief subjects for study in the first and second grades are reading, manual work, oral language with games as well as other appropriate lessons, physical exercises, music, drawing and writing on the blackboard, nature study, and history studies, etc. The range of matter in reading, arithmetic and English we recommend should be narrowed and restricted to topics of real social import. Real fundamentals should be taught more carefully than now. The work in history, and geography should be considerably enriched. Manual training and domestic science should have a larger allotment of time.

## VIII.—The High School

### Some General Facts About the High School

Table O

The number who graduate from elementary schools and go to the High School:—

	Graduated from Grammar School In full.	Entered High School Conditioned
1909 .....	234	20
1910 .....	262	22
1911 .....	252	11

Table P

Distribution by years for last three years—

	1st	2nd	3d	4th	P.G.
1908-1909 .....	295	167	91	67	10
1909-1910 .....	344	149	131	77	11
1910-1911 .....	361	153	125	72	5

Whole number of boys and girls—(Boys) 318; (Girls) 434; (Total) 752.

What becomes of its graduates? What number of them go to college? How do they do there? The number who go to business? etc:—

About one-half of them go to college. They generally do well. The boys who do not go to college find business positions. "I regularly have more applications for them from business houses than I have boys," says the principal.

## The High School

This High School has come up through trials and heavy tribulation to its present happy condition. For some years while the community was engaged in settling its differences as to where the new building should be located, the old building was wickedly overcrowded and the school is still suffering from the confused and depressed state to which its life was reduced in these "terrible years" of its history. Its new quarters are not yet quite in order, but when it is once firmly settled in them it will be able to do a work for which the community will not feel that it has paid too high a price. The Board of Education which was elected primarily to carry out the will of the people in erecting this building and to have it ready for occupancy at the beginning of this school year has done its work well. The building is a school palace as it ought to be, beautiful, commodious enough to provide room for all the students who may come for the years of the next decade, well arranged, unusually well lighted through the wise use of prismatic glass, as satisfactorily ventilated perhaps as it can be, and with a feature necessary to the success of every large High School,—a dignified and elevating meeting place for the whole school. For five years the Principal has not once been able to meet his school as a whole. It is not surprising that at the present time it lacks something of that unity and pull-together spirit which makes the best schools what they are. But those days are over now, and everything that I have been able to discover concerning it points to an energetic and prosperous future.

The old High School, built in 1891, had ten recitation rooms. The new one has 29 with a full complement of offices, library, study rooms, gymnasium, locker rooms, toilet rooms, etc. When it is finished there will be, as there should be, space and to spare for all needs. Some question has arisen as to the amount of equipment which such a school should have. The only test which can be applied in passing upon the requests of the separate departments for supplies, tools, and books for their work is not, can they get along without them? but, will they be used? I think more books are needed in the library, and recommend that a librarian be appointed to direct and assist the students in their use of them. A well-trained young woman in a high school library can teach the students quite as effectually as the regular teachers of the school. And the lessons in the use of books which she will teach are important.

The Arts and Crafts work which I regard as of the greatest possible value and which is as successfully taught here as anywhere

in the land should have a complete equipment. The full equipment for instruction in cooking, which is also well conducted, is still to be supplied. The wood shop is getting under way, but a small machine shop is needed and if the school is to do for its pupils all that a well-equipped secondary school must do in preparing its pupils for taking their proper places in the varied life of the large and many-sided city of which East Orange is really a part, it must soon offer courses in technical instruction and for this purpose it will need other shops, as for forging, foundry work, etc., and must make more adequate provision for mechanical drawing, shop mathematics, etc.

The problem of preparing a gymnasium is a pressing one. There is a rare opportunity of fitting up an open air one by providing the needed equipment and enclosing the open room at the top by means of windows on the more exposed side. The room would then have to be heated, but not to the degree that indoor rooms are heated. Shower baths could then be provided and the room originally intended for a gymnasium could be used for shops, lockers, etc. I have not gone into this plan carefully enough to press it upon those in charge, but an outdoor gymnasium has such great advantages over an indoor one that if it can be provided, it should be. The work in physical training is being well done and is so much more important than anything else that is being done or can be done in a high school, that all that is required for it should at once be arranged for. The medical examinations of students in the High School are now in charge of a woman physician. This is the best possible plan as far as the girls are concerned, but the physician who examines the boys should be a man, a young man, an athletic man, and a good man. If he is of the right sort he can remake the lives of not a small number of students.

That the gymnastic instructors may know all about the sort of exercises which their pupils require and may have a good opportunity to talk over the conditions of each pupil's needs with him individually and with that close contact which they find most valuable in this work, they must, I think, conduct the series of physical examinations which gymnastic instructors find to be requisite for their work. There seems to be an unnecessary duplication here; the school physician examines all students, and the gymnastic instructor examines all students. The duplication is only a seeming one. The objects of these examinations are different. Where one examiner discovers conditions that the other should be sure to take account of, they should be communicated immediately and if the proper efforts are made there need be no friction as to jurisdiction and authority.

## Examinations

What has already been said about examinations in the elementary schools applies here also. There are far too many of them. Four days are set apart for final examinations at the end of each

term. They are made much too concentrated a feature. They tend to keep teaching ahead of education in importance in the minds of the teachers. Beyond one formal examination a term they should not be required, and that one should be put into the last recitation period. The colleges are responsible for this pernicious prevalence of teaching-destroying examinations in high schools. They must be helped to learn better ways. Teachers should use their own discretion in requiring written lessons throughout the term, remembering only that the construction of knowledge which each student is engaged upon requires a due amount of recapitulating, that it may be properly ordered and arranged and that the educational conventions which we must fulfil in the spirit, if not in the letter, demand a certain facility in writing examination papers as a part—let us hope a waning part—of the training of educated persons. All students should be required to take the final examinations; none should be excused. Students who fail twice in their term's work should go back to the next lower grade.

Report cards are now sent to parents every six weeks. Twice a year should be enough unless the student is failing; then the report should be sent at once and repeated oftener than every six weeks until conditions are improved. The bookkeeping and the reports which teachers are required to make should be reduced to their lowest terms. Bookkeeping is so different from teaching in its character that the same mind cannot usually do both well. Sufficient clerical assistance should be provided to free the teachers for their essential work of teaching.

There is one other feature of this school which does not make for educational efficiency. I refer to the custom of requiring students who have not performed their classroom work satisfactorily to come back for an hour in the afternoon. This provision invites students to evade their duties at the time when they should be performed. It gives them two chances to do what they ought to do with only one, and again it treats high school folks as if they were grammar school children. It does not put a proper degree of responsibility upon them. Students should be put into a position where they must do their own work. If they need special help from their teachers, the teacher should see them after class or at a special office hour which need not be held oftener than once a week if the classroom instruction and the preparation of the students are of the right sort. Individual instruction is needed in the high school and students should be encouraged to talk over their work with their teachers, but this must not be allowed to interfere with the larger responsibility which students must assume in the high school.

## The Course of Study

It is not desirable that I should undertake to estimate the value of the instruction which is being given by individual teachers. Two or three things I do want to say, however, but not in the way of praise or blame, rather as suggesting profitable lines of development.

The modern languages are taught by the direct method which most authorities regard as the best. Conversation should find an even larger place in the French classes. Latin could be made less formal and more a study of thought relations in the grammar, and of content in the work of translation. Oral English should have more attention.

General science should take the place of physical geography in the first year. It should, however, include the more profitable parts of physical geography but in simplified form. A most interesting course in practical chemistry is now being given in which the requirement set by colleges is disregarded, and the work developed in accordance with the knowledge needs of the pupil. This is a move in the right direction.

All students, except those in the commercial course, are required to take algebra, but for some it is hardly a profitable study. Would it not be better to offer them something else?

In the classical and scientific courses students begin two foreign languages in the same year; surely this is not wise.

One high school of which I know practices the excellent custom of sending all students whose writing or spelling is below par to the commercial teacher who has charge of those subjects for special instruction in them. He keeps them in his class in writing and spelling until they are sufficiently advanced to omit special lessons in the subject of their deficiency. President Hall maintains that it is the duty of those who make high school courses of study to provide in them for a rapid and effective review of grammar grade subjects. In English this is not necessary, though the burden of teaching English grammar, if it must be taught, should be on the high schools. In arithmetic, geography and history this review would be very desirable, and need not unsettle the regular program overmuch.

Students who are not going to college should not be encouraged to take Latin; most of them should not be permitted to do so.

I would abolish the so-called "academic course" which is a general course leading nowhere, and substitute for it a course for girls of a somewhat technical kind, but with plenty of culture subjects in it as well intended to fit them better to preside over a well ordered home. The chief subjects in this course would be science (chiefly biology and the course in applied chemistry, hygiene and sanitation), domestic arts, arts and crafts work, English, history, and perhaps one foreign language. Boys should have a course open to them made up of shop work, mechanical drawing, physics, applied chemistry, English, history, etc., with a modern language as elective. The college preparatory courses are vocational; they prepare directly for further activities; so does the commercial course which will become a strong feature of the school. The other one does not and ought to. Music is one of the best of studies in a high school and should have more attention.

## The Students

"About 40% of our pupils," writes the superintendent, "enter the high school—80 to 85 per cent of each graduating class." This is a remarkably fine state of affairs, and one of which the community may well be proud. But what happens to them after they get to the high school? The same thing that happens in most high schools. They drop out in very large numbers at the end of the first year. The following table shows "the mortality" in the classes which entered in 1906, 1907, 1908.

Year	First year class	Second year class	Third year class	Fourth year class
1906	214			
1907	268	115		
1908	297	133	90	
1909		167	91	67
1910			131	77
1911				87

The membership in second-year classes in high schools generally is from one-third to one-half as large as that of first year classes. About 25% of the boys who enter continue to the end of the course; about 31% of the girls remain to graduate. What reasons are there for this highly unsatisfactory state of affairs? Here is the examination record for last June (1911). The per cent of each class that failed is rather high.

## Results of Examinations

Table Q

High School, June, 1911

Name of Teacher	Aver. No. per Section	Per Cent Excused	Per Cent Failed of Class	Per Cent Failed of Those Examined
x	21	45	6	11
y	21	38	9	14
z	23	28	10	15
a	16	23	10	13
b	16	31	12	17
c	21	65	13	39
d	17	32	14	20
e	22	31	14	21
f	27	46	14	26
g	17	37	15	24
h	20	38	16	26
i	27	47	17	33
j	18	20	19	24
k	19	43	20	36
l	21	26	20	27
m	23	28	20	27
n	21	34	22	34
o	30	47	23	44
p	24	43	27	48
q	22	21	27	34
r	27	48	27	53
s	20	33	38	56

Record of Students for the Year.  
Table R

	1st yr.	2d yr.	3d yr.	4th yr.	Total
No. failed last yr. ....	*124	29	14	2	169
" 70—80% .....	113	76	55	50	294
" 80—90% .....	52	26	21	30	129
" 90—100% .....	8	3	2	7	20
Total promoted .....	173	105	78	87	443

\*NOTE.—Some years ago the Board of Education established five year courses for those who found the work of a four years' course too difficult. These pupils are classified twice in the first year and are included in the "failed" list above, to the number of 36.

Here are the reasons given for leaving the high school, October 24, 1910 to June 1st, 1911.

Summary by Reasons  
Table S

	I B. G.		II B. G.		III B. G.		IV B. G.		Total
Went to work; poor.....	4	..	2	1	..	..	..	..	..
Fair or good.....	4	3	2	..	2	..	..	..	18
Behind; poor work.....	10	4	2	1	2	2	..	1	22
Poor health.....	2	13	..	2	..	4	..	2	23
Moved.....	4	5	2	4	1	1	..	..	17
To private school.....	..	1	..	1	1	..	..	..	3
"Incapable".....	1	..	..	..	..	..	..	..	1
Dropped or suspended...	..	1	1	..	..	..	..	..	2
No reason given.....	2	2	..	..	..	..	..	..	4
Before October 24.....	3	..	1	..	2	2	..	..	8
									98

But there are more reasons than appear in this list. The grammar schools and the high schools do not join. They are not members of one well related whole. This is true generally, but is somewhat more true of East Orange than of some other places, because of a somewhat protracted but now happily disappearing mutual misunderstanding of functions and purposes. High school teachers find the grammar school pupils who come to them somewhat helpless and unable to do independent work. "They lack self-control. They do not know how to study. Everything has been done for them; they do not know how to do anything for themselves." These are typical statements. Some high school teachers think that there has not been enough drill, others that too small an amount of work has been done. The elementary teachers on their part maintain that the high school teachers do not treat their pupils with sufficient care; that they leave them to flounder and sink without throwing them a life preserver, though they have used no care in marking the depth of the water. These statements are both true, but not wholly true, nor do they when taken together make up the

whole truth. Elementary teachers do too much for their pupils; high school teachers do too little. Something of the protective mothering which is so admirable a feature of elementary school work must be developed in the High School. The entering class could be divided up into sections and each teacher detailed to act as an advisor and father confessor to one section. This teacher should be responsible for his students through their entire course. This shepherding of high school students would help many who otherwise will drop out from the destructive effects of a failure at the beginning of life which in addition to destroying their proper self esteem robs them of their right to an education.

The students should be organized, too, to help their more backward fellows out of difficulties. They can, and in some places do, take it upon themselves to give tutorial help to those of their companions who need it. They rally vigorously to the cry that "no student must be allowed to fail in this school." This cooperative effort on the part of students is of the greatest benefit to him who gives as well as to him who takes. Like student self government, within proper limits, it can be made one of the great sources of strength in a high school.

### Need for a Six Year High School

But the utmost precaution along these lines will not eliminate certain fundamental difficulties which attach to the course of study as it is usually arranged. Pupils are expected to spend eight years in the same round of studies which are unnecessarily drawn out in quantity to provide an educational filling for a course of that length. The essentials can be taught in a shorter time and better taught than at present if we will but concentrate upon them. Our elementary school pupils become stale at their work. They mark time instead of marching. Sixth grade pupils do their arithmetic work almost as well as eighth grade pupils. There is much lost motion in the upper grades of the grammar schools. Pupils are eager to get on to other things.

On the other hand much that is attempted in the first year of the high school when students have reached the age of adolescence can be done very much better at the age of 12 and 13. This is the period for drill and formal work; the age of 14 demands richness of content and larger opportunities for thinking. The chasms between the elementary schools and the high school might be bridged if the change of place, studies, methods, teachers and discipline which must now be made abruptly were made gradually. Besides the change in the nature of the pupil must be considered. Why should there not be a letting down of the high school into the grammar schools, and a lifting of certain grammar school studies into the high school course? These facts have led some of the best educators to reorganize their course of study into six years of elementary school work, and six years of high school work. So far as it has been tried, the results are more than satisfactory to everyone who has had a hand in these experiments; all concerned are



enthusiastic and claim that an improvement of the greatest value has been attained.

The general course for the first three years in four such schools whose good work I can vouch for is as follows:

### General Course

Seventh Year	Eighth Year	Ninth Year
English: Literature..... 2 Language..... 2 Spelling..... 1	English: Literature..... 2 Language..... 2 Spelling..... 1	English..... 5
Arithmetic..... 5		
Industrial Geography.. 2 Industrial History.... 2	History and Civics.... 5	
Physical Training.... 1	Physical Training.... 2	Physical Training.... 2
Music..... 2	Music or Oral English. 2	Music or Oral English. 2
Physiology..... 1	Physiology and Hygiene..... 2	
Drawing..... 2 Penmanship..... 2		
Manual Training: Girls: Cooking..... 2 Sewing..... 2 Boys: Woodwork... 4	Manual Training: Girls: Cooking..... 2 Sewing..... 2 Boys: Woodwork... 4	Manual Training: Girls: Cooking..... 2 Sewing..... 2 Boys: Woodwork... 4
Select 1 of the following: French..... 5 German..... 5 Spanish..... 5 Latin..... 5 Bookkeeping..... 5 Stenography..... 5	Select 2 of the following: French..... 5 German..... 5 Spanish..... 5 Latin..... 5 Bookkeeping..... 5 Stenography..... 5 Algebra..... 5 Drawing: Freehand or Mechanical.... 5	Select 3 of the following: French..... 5 German..... 5 Spanish..... 5 Latin..... 5 Bookkeeping..... 5 Stenography..... 5 Algebra..... 5 Commercial Arith- metic..... 5 Ancient History.... 5 General Science.... 5

NOTE—Two languages may be selected only by permission.

Besides, each such high school offers a commercial course and a vocational course which begin with the seventh year. East Orange is in a peculiarly favorable position to try this method of re-organizing her schools; no more room than is now in use is required; nothing but a new course of studies and the necessary re-arranging of the work of the teachers which would be involved. This high school or intermediate work might be given at the high school buildings, or in certain elementary schools, or part of it in each place. Some of the principals have been urging the need for an industrial or trade school in East

Orange for some years. There is need for it, for far too many boys stop their education at or before the end of the sixth grade. This vocational school could be organized as an intermediate high school in certain rooms in one of the elementary school buildings. The general course could be given in another place and the regular 7th and 8th grade work, which is now being done could still be continued in some one or two of the schools. East Orange would then be able to offer every pupil who completes six years of elementary school work a choice of three opportunities for further specialized education. He could either go to a six year high school where he would begin the languages when he ought to begin them and could there finish the main things in his grammar school course, with the aid of secondary methods and teachers, and beside would get the great benefit of promotion to a new work and dignity and have time enough to do his secondary school work in a more leisurely and thorough fashion; or he could go, if he chose, to a trade school and learn the elements of a useful trade and along with it take such school studies as would contribute to his proficiency in it; or go on as at present.

This opportunity to enlarge and enrich the course and at the same time cure some of the radical defects of the present arrangement seems to me too valuable a one to be overlooked.

### Need for Vocational Guidance

Dean Phillips of Yale is fond of recalling the fact that in earlier days the ministers in the towns of Connecticut and in the rest of New England were self-appointed guardians of the young. Most zealously did they watch for the evidence of superior ability among them, and when a boy showed talent of any kind they urged him to go to college and themselves gave him the lessons and helped to provide the wherewithal needed that he might enter there. The earlier college men were most of them their boys in school whom they advised and encouraged and counseled, and it was because of their efforts, says Professor Phillips, that Connecticut supplied ministers and judges and college professors and leaders of the people in former time to almost every other state of the union. What more splendid service could they have performed than the service of helping young people to settle upon useful callings for which their talents and their inclinations fitted them! That duty is neglected today. It belongs to both elementary and high schools and here and there they are beginning to perform it.

They are going about it in three ways: (1) by employing a vocational expert,—one who has made a study of the special opportunities which the leading callings offer and the way to prepare for them, and to set about entering them; to consult with students and advise them in the choice of an occupation; (2) to give a course of instruction (say) for one term to the first year students in the high school upon typical occupations, what they offer, and how to prepare for them; this is a culture course of considerable value; (3) in addition to these measures at least one high school—that of Grand Rapids, Mich.—has planned a series of compositions

running through the entire four years which are intended to reveal to the student himself, and to his teachers somewhat more clearly than anything else will, what his particular talents and preferences are and what calling he should enter. This school takes its responsibility for vocational assistance very seriously and has blazed a path for others to follow. An investigation by the principal, Mr. Jesse B. Davis, disclosed the fact that of the 531 boys in his school 240 had decided upon some vocation. Of the 291 who had not, 194 had tried, while 97 had made no effort; 235 said they would like to have advice; 56 were indifferent; 105 of the 240 who had decided reported that the matter had been settled by their parents, 26 by teachers, 33 by companions; 59 had chosen any one occupation because a friend or relative was following it. About  $\frac{1}{3}$  were going to be engineers, 22 to be lawyers, and 12 farmers. Teachers of mathematics would agree, says the principal, that 73 of the boys who were going to be engineers would do better work in some other calling.

The compositions which the students write in the first term of the first year are upon these subjects: 1, My family; 2, My health; 3, The record of a day; 4, My habits; 5, My likes and dislikes; 6, The most important event in my life; 7, My ambition; 8, My church; 9, A self estimate. The subjects for the second term are biographical. They are (Franklin) at my age, how (Edison) succeeded, my opportunities compared with those of (Lincoln), have I the qualities found in (great men)?

The subjects for the first term of the 10th year are (1) The kind of employment I can get now, (2) Child labor; (3) The wages of those leaving school at the 8th grade compared with those of high school graduates, (4) On different topics assigned by the teacher. The subjects on which they write during the 11th year are: The elements of success, character, duty and obligation; and during the 12th year, the relation of the individual to society as represented in its several institutions.

Mr. E. C. Moore,

Dec. 8, 1911.

Yale University, New Haven, Conn.

Dear Sir:—

Our Superintendent of Schools has turned over to me your letter inquiring about our work in Vocational Guidance. I have not yet a complete account of our work in print, but hope soon to have something out that I can send in reply to similar requests. I will enclose an outlined bibliography of the work conducted through the Department of English in our high school. This, however, is but a small part, comparatively, of the work that is being done. Under the administration of our school, we have pupils divided into six large groups under charge of a teacher who may be called a vocational counselor. This teacher has but three classes a day and the rest of his time is given to the individual interests of his pupils. These teachers are more or less experts in guiding their pupils toward a proper goal in life, whether it be toward college or business pursuits. These teachers are equipped with the best books to be obtained to aid them in the work. If you can secure a copy of the proceedings of the North Central Association of Colleges and Secondary Schools, published this last spring, you will find a paper which I gave at their meeting in March. This paper is somewhat out of date but will undoubtedly serve your purpose.

Sincerely yours,

JESSE B. DAVIS.

Another recommendation which I should like to make is that all high school students be required to give up membership in academic secret societies for the reason that high school students are altogether too young to play with sharp-edged social weapons of that sort, and because membership in such societies is always destructive to the purposes of a public high school. Instead of these the student organizations in the school should be built up.

I recommend that a special effort be made by principals, teachers and student body to build up the unity and school spirit which the harassing conditions of overcrowding in the old building have in a measure diminished.

## IX.—Summary of Recommendations

### All Schools

1. That a systematic effort be made to secure a more active coöperation on the part of parents who have children in the schools
2. That there be a more thorough systematization of the work of the Board of Education, the Superintendent of Schools and the other officers of the system, such as shall specify the functions and responsibilities of each.

### Elementary Schools

3. That changes needed to insure greater protection against fire be made.
4. That the ventilation of buildings be improved.
5. That additional ground be added where most needed; and that more library books, dictionaries and encyclopaedias be provided where they are needed.
6. That kindergarten children attend but one session.
7. That the school day for 1st and 2d grade children be made as short as possible, consistent with the requirements of the school law.
8. That the hours of required home study be greatly reduced.
9. That emphasis be shifted from an examination system of schools to a system which uses examinations as mere incidental features of its work. That formal examinations be given at the end of each term and that all students be required to take them.
10. That regular reports on the standing of pupils be sent to their parents twice a year and irregular ones whenever they are necessary.
11. That the authority of supervisors of instruction in special subjects be strictly defined.

12. That principals be not required to teach so much and thus be left more free for their work of supervision.

13. That meetings be held for the discussion of recent contributions to the literature of education.

14. That a systematic effort be made to further reduce the number of over-age pupils in the several grades.

15. That teachers do more individual work with backward children and if possible that another ungraded room be opened for irregular pupils.

16. That an effort be made to secure greater permanence in the teaching staff by raising the salary of teachers.

17. That a new course of study be framed. Some changes which should be made are suggested.

18. That standards of quality be raised and standards of quantity be lowered.

19. That teachers do less, and pupils do more in the daily work of the schools.

## The High School

20. That a librarian be appointed at the High School and all needed books be supplied.

21. That all the shops needed for good technical work be equipped as soon as funds are available.

22. That a gymnasium, preferably an open air one, be equipped at once.

23. That a male physician be detailed to make the health examinations of boys at the High School, and that the physical directors make such independent examinations as they need to make to carry on their work to advantage.

24. That formal examinations be required only at the end of each term, and that all students take them; that regular reports be sent home twice each year, irregular ones whenever necessary; that after repeated failures students be put into a lower class.

25. That the practice of having students return in the afternoon to do work which should have been done in the morning be abolished, and that teachers arrange to hold regular office hours for the convenience of students who may wish to consult them.

26. That a systematic effort be made to cut down the number of failures in high school work; that the chasm between the elementary and high schools be bridged.

27. That a six-year high school course be established, and that provision be made so that pupils who have finished six years of elementary school work may then elect either to take a six year high school course or instruction in a vocational course which should be established, or go on in an eight grade elementary school course as at present.

28. That provision be made for vocational assistance.

29. That high school students be required to give up membership in all academic secret societies; and that the student organizations of the high school be built up.







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